

MEETING THE ASYMMETRIC CHALLENGE:
HOW AIR AND SPACE POWER CAN COMBAT ADVERSARIES USING
DISPERSED AND HIDDEN FORCES

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DISCLAIMER

The conclusions and opinions expressed in this document are those of the author. They do not reflect the official position of the U.S. Government, Department of Defense, the United States Air Force, or Air University.

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ABSTRACT

This study addresses how air and space power can best combat adversaries using dispersed and hidden forces (i.e. insurgents, guerrillas, and terrorists). Through research of past air and space efforts to combat these forces; the strategy, organization, and support of representative groups (i.e. Vietnamese communists, Hamas, Iraqi insurgents, and al Qaeda); and a model for strategy against these groups, air and space power demonstrates significant relevance. Air and space power relevance is important, as it can support and enable the success of US operations against adversaries in the foreseeable future. As adversaries continue to counter American conventional superiority, US leaders and commanders must pursue proper employment of air and space power to answer these challenges effectively.

Air and space power via special operations, air attack, airlift, ISR, and information operations hold congruent links to combating these adversaries and provide capabilities to overcome incongruence when innovatively employed with agility and flexibility. This thesis provides a past, present, and near future assessment of how these air and space functions can combat enemies using dispersed and hidden forces. This study reveals the importance of using these functions in conjunction with other civil-military-political efforts and national instruments of power, and the role of intelligence as a key enabler.

The author proposes a model that plugs air and space capabilities, or tasks, into an integrated political, economic, civil-military effort against enemy dispersed forces to meet US national objectives. The Clausewitzian trinity of the people, the government, and the armed forces provides the foundation for this model. To combat dispersed and hidden forces, this model intertwines and tailors air and space power in support of a civil-military-political effort to strengthen a host nation trinity and weaken the adversary trinity. Air and space power offers means to help win the people in a host nation, and to an extent, in the global community. In combating insurgents, guerrillas, and terrorists such as al Qaeda, the population is the primary battlefield, and center of gravity. The US and host nation governments can employ this power as part of a strategy to boost legitimacy and popular support while isolating and defeating insurgents. Air and space power's tailorable ability to strengthen a host nation trinity and weaken the adversary trinity answers how air and space power can best combat dispersed and hidden forces.

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Introduction

We cannot possibly draw up definite plans, or even evolve any very hard and fast tactical method to meet every possible class of contingency; but if we have a clear idea of the basic principles we shall be able to apply and adjust them to suit each contingency as and when it arises.

*—John Cotesworth Slessor
Air Power and Armies*

In 2005, the United States enjoys conventional military superiority over every other military in the world and is poised to defeat its enemies with massive firepower and advanced technology—the so-called American way of war.¹ The overwhelming US advantage is particularly evident in airpower, and as a result, airpower often became the first responder and the lead force during the 1990s. Those who have achieved some degree of success against US forces have countered conventional superiority, particularly airpower, by using tactics which disperse and hide their leadership and forces thus removing lucrative targets and avoiding the crushing blow of conventional airpower. Such guerrilla and terrorist adversaries quickly mass to strike and just as quickly disperse and blend back into the population or environment. These asymmetric methods are designed specifically to offset US conventional superiority and to limit the effectiveness of airpower. Assuming the United States continues to maintain superiority in conventional forces, many future adversaries will likely adopt similar asymmetric methods.

Paradoxically, the stronger US conventional military might grows, the more likely it is that America's adversaries will resort to asymmetric methods and strategies and the US ability to combat dispersed and hidden forces will become more significant. The United States must consider how air and space power can answer this challenge most effectively.

American airpower, as employed by the United States Air Force, has been most effective against lucrative targets such as enemy industry, lines of communication, supply, and large formations in the field. During World War II airmen achieved varying degrees of success by striking lucrative military, economic, and infrastructure targets.

¹ Max Boot, *The Savage Wars of Peace: Small Wars and the Rise of American Power* (New York, N.Y.: Basic Books, 2002), xiv.

Air Corps Tactical School (ACTS) instructors fostered this focus on lucrative targets by advocating an air theory based on scientific analysis to selectively target a nation's economic vulnerabilities. Many ACTS instructors argued that strategic bombing could destroy an enemy's industrial economy and collapse its will and/or ability to fight. ACTS instruction planted seeds that grew into the industrial web theory, which later blossomed into high-altitude precision daylight bombing (HAPDB) doctrine. Downplaying other aviation roles, many airmen focused on strategic bombardment as the icon of an independent air force. Hungering for autonomy, these airmen pursued "air operations independent of the army and its ground combat function" during World War II and placed their faith in HAPDB to strike a decisive blow against lucrative "strategic" targets.²

During the Korean conflict, however, most of the economic and industrial infrastructure targets were not in North Korea and therefore off limits, limiting the impact of airpower. In the Vietnam War, another non-industrialized enemy further impeded American airpower effectiveness by removing lucrative military targets in the field through the use of guerrilla tactics. At the onset of Operation ENDURING FREEDOM (OEF), airmen and special operations forces worked together to decimate exposed Taliban groups. But the Taliban quickly learned that massing and fighting in the open was "suicidal in the face of American air power. They then dispersed into covered and concealed positions" to deny airmen their preferred targets of massed conventional forces.³ At this writing Operation IRAQI FREEDOM has disintegrated the Iraqi Army but resistance has continued via guerrilla terror tactics.

The question this research addresses is how can air and space power best combat adversaries using dispersed and hidden forces? The answer to this question holds great significance for air and space power relevance and the success of US military operations for the foreseeable future. This study explores the relationship between air and space power and adversaries that deny lucrative targets by dispersing and hiding their forces.

² Tami Davis Biddle, *Rhetoric and Reality in Air Warfare: The Evolution of British and American Ideas About Strategic Bombing, 1914-1945* (Princeton, N.J.: Princeton University Press, 2002), 131. For further information on ACTS and its contribution to American air theory see Peter R. Faber, "Interwar US Army Aviation and the Air Corps Tactical School: Incubators of American Airpower," in *The Paths of Heaven: The Evolution of Airpower Theory* (Maxwell Air Force Base, A.L.: Air University Press, 1997).

³ Stephen Biddle, "Afghanistan and the Future of Warfare: Implications for Army and Defense Policy," US Army War College Monograph (Carlisle, P.A.: US Army War College, 2002), 52.

Comparing and contrasting air and space power functions with the characteristics of guerrilla and terrorist tactics should reveal areas of congruence, e.g. where air and space means coincide or correspond with dispersed force actions so as to counter their asymmetric challenge. An understanding of these relationships should suggest the most appropriate uses of air and space power when facing such adversaries.

New political-military realities require American airmen to take a fresh look at air and space strategies, capabilities, limitations, and possibilities beyond the comfortable confines of conventional warfare. Jeffrey Record explains, “Conventional warfare’s firepower [and] attrition variant plays to American material and technological superiority and offers a means of substituting machines for American blood; yet it is vitally dependent on the presence of detectable and destroyable enemy targets whose elimination will render the enemy defenseless or otherwise eager to terminate hostilities.”⁴ As adversaries choose unconventional strategies and tactics to deny lucrative targets, US strategists and decision makers must adapt their approach to the realities of adversaries using dispersed forces.

I made two assumptions in conducting this study. First, air and space power may be limited by political or military restrictions and is “unlikely to provide either ‘cheapness’ or ‘victory’ in a guerrilla war.”⁵ Second, I discuss unconventional and guerrilla warfare, insurgency, and the current global war on terrorism in the context of war and not as military operations other than war (MOOTW).⁶

This thesis is not without limitations. First, my analysis includes examples of terrorist, insurgent, and guerrilla forces’ strategies and tactics, but does not attempt to provide in-depth background of their development. Second, I will not attempt to address every reason forces might disperse or hide, but rather how US capabilities may effectively respond to this challenge. Third, my discussion is limited to the unclassified level.

⁴ Jeffrey Record, “How America’s Own Military Performance in Vietnam Aided and Abetted the North’s Victory,” *Why the North Won the Vietnam War*, edited by Marc Jason Gilbert (New York: Palgrave, 2002), 131.

⁵ Mark Clodfelter, *The Limits of Airpower: The American Bombing of North Vietnam* (New York, N.Y.: The Free Press, 1989), 210.

⁶ This assumption is in agreement with the joint and Air Force definition of MOOTW, as it does not reference any of these terms. AFDD 2-3 does include combating terrorism as an overlapping mission of MOOTW.

This introduction highlights the challenges dispersed and hidden forces present air and space power, addresses the significance of current dispersed forces' ability to counter air and space power, and provides the roadmap for the remainder of the paper. Chapter 1 discusses how America's counterinsurgent experience and conventional mindset have influenced the Air Force's use of air and space power. Chapter 2 describes groups that have exploited tactics of dispersal and hiding to develop a better understanding of the nature of dispersed forces and their operations. It identifies the purposes and objectives, professed strategies, organization, and support of Vietnamese communists, Hamas, Iraqi insurgents, and al Qaeda. Chapter 3 explores the congruent links between air and space power and dispersed force operations. In addressing congruence it considers air and space applications in the past, present, and near future. Chapter 4 provides a framework for applying air and space means so as to overcome its incongruence with dispersed force operations. Using this framework to integrate air and space power strengths and nontraditional uses to overcome incongruence, this chapter portrays how air and space power can best combat dispersed and hidden forces. The conclusion of this paper offers final recommendations.

Chapter 1

The USAF's Counterinsurgent Experience And Conventional Mindset

One general inference to be drawn has been that in twentieth-century war, defeat will almost always be avoided (and outright victory likely gained) by the side that has secured air superiority. Indeed, a more comprehensive perusal would probably show that virtually the only exceptions concern counterinsurgency warfare.

—Neville Brown

The deplorable experience in Vietnam overshadows American thinking about guerrilla insurgency.

—Anthony James Joes

Long before the US Air Force became a separate service, American airmen tied airpower to major conventional war. Billy Mitchell preached that air forces should attack the “vital centers” of the enemy and destroy their means to make war.⁷ Air Corps Tactical School instructors claimed that targeting an enemy’s critical industrial and economic nodes could undermine “both the enemy’s capability and will to fight.”⁸ After World War II, the United States Strategic Bombing Survey seemed to affirm the decisive role of airpower.

After the frustration of the Korean conflict, conventional wisdom assumed that preparing for a big war made the Air Force ready for lesser wars. This had proved to be true for the limited conventional war in Korea. When the Air Force Vice Chief of Staff in 1954 questioned “Air University, the Tactical Air Command, and Far East Air Forces” on “whether or not the Air Force could adequately respond to the challenge presented by Ho Chi Minh,” many in the Air Force dismissed the potential for a different kind of war and clung to preparing for big war.⁹ With President Eisenhower promising no more

⁷ William Mitchell, *Winged Defense: The Development and Possibilities of Modern Air Power—Economic and Military* (Mineola, N.Y.: Dover Publications, Inc, 1988), 16-17.

⁸ Peter Faber, “Interwar US Army Aviation and the Air Corps Tactical School: Incubators of American Airpower,” *The Paths of Heaven: The Evolution of Airpower Theory* (Maxwell AFB, A.L.: Air University Press, 1997), 217.

⁹ HQ USAF, Chief of Staff message DTG 302128Z, March 1954, as quoted in Dennis M. Drew, “U.S. Airpower Theory and the Insurgent Challenge: A Short Journey to Confusion,” *The Journal of Military History* 62 (October 1998): 816.

Koreas, the Air Force lacked the incentive to draw lessons from limited wars, especially from the ongoing insurgency in Vietnam. President Eisenhower conveyed that he was “determined not to let U.S. forces become bogged down in small conventional wars.”¹⁰ Airmen agreed and many civilian defense leaders “believed that ‘atomic airpower’ could deter all forms of warfare, and if deterrence failed, could quickly defeat any enemy.”¹¹ In 1956 Air Force Secretary Donald Quarles expressed the prevailing mindset saying, “It seems logical if we have the strength required for global war we could handle any threat of lesser magnitude.”¹²

The Air Force’s failure to consider wars other than big conventional or nuclear wars impacted the use of airpower in Vietnam. For example, nuclear-capable fighter-bombers, such as the F-105, were not ideal platforms for a limited war in Vietnam much less for fighting an insurgency. Instead of developing airpower functions specifically for counterinsurgency, the Air Force religiously held to its mantra echoed by General Hoyt S. Vandenberg to a Senate subcommittee in June 1953, “The proper role of air forces is to destroy the enemy’s industrial potential.”¹³ Although close air support missions were important in the war in South Vietnam, airmen pursued deep interdiction and strategic targets over North Vietnam during the three-year long Rolling Thunder air campaign, which had minimal impact upon the southern insurgency.

Even after the Vietnam experience, Air Force leaders such as Generals Curtis LeMay and William Momyer expressed their preference for big conventional war over adapting the use of airpower to fight an insurgency. Generals LeMay and Momyer both pointed to the LINEBACKER campaigns in 1972 as proof that relentless conventional bombing of the North Vietnamese could have won the war. LeMay illustrated his faith in conventional bombing by saying it could have won the Vietnam War “in any two-week period you want to mention.”¹⁴ But Air Force strikes against conventional targets proved ineffective in countering the unconventional methods exploited by insurgents.

¹⁰ David Alan Rosenberg, “The Origins of Overkill: Nuclear Weapons and American Strategy, 1945-1960, *International Security* 7, no. 4 (Spring 1983), 42.

¹¹ Drew, “U.S. Airpower Theory and the Insurgent Challenge: A Short Journey to Confusion,” 813.

¹² Robert F. Futrell, *Ideas, Concepts, Doctrine: A History of Basic Thinking in the United States Air Force 1907-1967*, vol. 1, (Maxwell AFB, A.L.: Air University Press, 1989), 451-452.

¹³ Robert Frank Futrell, 434.

¹⁴ Mark Clodfelter, *The Limits of Airpower: The American Bombing of North Vietnam* (New York, N.Y.: The Free Press, 1989), 206-207.

Because the Air Force missed opportunities to capture lessons from its counterinsurgent experience, airmen tackled the Iraqi insurgency with functions and Basic Doctrine that offered few lessons learned about how to employ air and space power in a counterinsurgency. Basic Doctrine actually provides less guidance on counterinsurgency at this writing (2005) than during Vietnam. The 1964 Basic Doctrine contained two pages on counterinsurgency in Chapter 6, "Employment of Aerospace Forces in Counterinsurgency."¹⁵ Current Basic Doctrine no longer contains this information.¹⁶ Although some American airmen "began to seriously investigate the peculiarities of airpower application in insurgent warfare," the Air Force as a whole appeared to lack interest in the subject.¹⁷ Counterinsurgency was not what the Air Force did best, did not appear to be a decisive airpower function, and was not likely to draw a bigger piece of the defense budget.

A review of the operational functions in Air Force Basic Doctrine reveals that the terms insurgency and guerrilla warfare are not mentioned. The Special Operations section briefly mentions that "special airpower operations (denied territory mobility, surgical firepower, and special tactics)" are used to conduct "unconventional warfare," "counterterrorism," and "foreign internal defense."¹⁸ Basic Doctrine occasionally uses the term military operations other than war (MOOTW), but the joint and Air Force definitions of MOOTW do not include counterinsurgency or its synonym foreign internal defense (FID). Basic Doctrine inclusively states that these operational functions can be applied across the entire range or spectrum of military operations, but offers no lessons or guidance on the air and space power functions that best combat insurgency.

To find mention of counterinsurgency, one must review the role of Air Force special operations in foreign internal defense. The Air Force special operations'

¹⁵ Air Force Manual (AFM) 1-1, United States Air Force Basic Doctrine (Washington, D.C.: Department of the Air Force, 14 August 1964).

¹⁶ To the Air Force Doctrine Center's credit AFDD 2-3.1, *Foreign Internal Defense*, provides a good discussion of insurgency and counterinsurgency issues. However, it is likely that few operators outside of Special Operations are aware of this document.

¹⁷ Dennis M. Drew, "Air Theory, Air Force, and Low Intensity Conflict: A Short Journey to Confusion," *The Paths of Heaven: The Evolution of Airpower Theory* (Maxwell AFB, A.L.: Air University Press, 1997), 347.

¹⁸ Air Force Doctrine Document (AFDD) 1, *Air Force Basic Doctrine*, 17 November 2003, 53. Joint Publication 1-02, "DoD Dictionary of Military and Associated Terms" includes participating in another government's action programs to fight insurgency in the definition of Foreign Internal Defense.

responsibility for FID reflects most, if not all, of the influence from past counterinsurgent experiences. In conducting FID, special operations personnel work with host nation governments and forces to train and equip them to fight insurgents and terrorists. AFDD 2-3.1 *Foreign Internal Defense (FID)* explains:

Air Force FID supports operations across the spectrum of warfare and primarily consists of assessing, training, advising, assisting, and integrating foreign aviation forces. Increased emphasis in this area can multiply our influence globally without requiring a standing-force presence in a multitude of locations. Air Force FID activities are a key contribution to combating terrorism. FID activities provide the host nation assistance to prevent the establishment of terrorist organizations or to eradicate terrorist activities. The Global War on Terrorism will take place largely in the FID arena. Air Force FID activities aimed at helping foreign governments resist and defeat terrorism provide a major contribution to the overall Global War on Terrorism effort. Strengthening the ability of friends and allies to defend themselves or function as viable coalition partners will become vital instruments of US foreign policy.¹⁹

Although the “first-ever USAF squadron dedicated to” the FID mission, the 6th Special Operations Squadron, was not fielded until October 1994, the Air Force had provided FID-type training, advisement, and assistance in Operation Farm Gate in Vietnam.²⁰ Beginning in 1961, the 4400th Combat Crew Training Squadron deployed to South Vietnam to “train the South Vietnamese in air operations against the Viet Cong and develop tactics for the employment of airpower in counterinsurgency.” Farm Gate training and assistance focused on “interdiction and close air support missions,” but also included “combat airlift and reconnaissance.” But according to Rollin Anthis, Second Air Division Commander, “Farm Gate personnel believed that they were really in South Vietnam to support US Army special forces soldiers in unconventional warfare operations such as inserting hunter-killer teams into enemy territory, aerial resupply, and so forth.” Thus, Operation Farm Gate eventually drifted from its original intent as “American airmen largely abandoned the training mission, and combat operations

¹⁹ Air Force Doctrine Document (AFDD) 2-3.1, *Foreign Internal Defense (FID)*, 10 May 2004, i.

²⁰ Wray R. Johnson, “Ends Versus Means: The 6th Special Operations Squadron and the Icarus Syndrome,” *Air & Space Power Chronicles - Chronicles Online Journal*, 12 January 2000, n.p., on-line, Internet, 4 February 2005, available from <http://www.airpower.maxwell.af.mil/airchronicles/cc/WJohnson.html>.

became more and more frequent.”²¹ FID efforts continued to diminish as “the ground war in Vietnam heated up in 1965 with the introduction of US ground combat forces.” Air Force special operations forces “became more concerned with supporting surface forces and interdiction than providing training assistance to the South Vietnamese and other air forces in the region.”²² Even if the FID effort had not suffered, it is questionable if any airpower use in Vietnam was significantly destroying or disrupting Viet Cong organization prior to their massing conventionally for the Tet Offensive. FID airpower provided little, if any, means to oppose the Viet Cong’s social and political organization (discussed in detail in chapter 2).

AFDD 2-3.1’s description of host nation airpower limitations seems to point out some of the USAF’s limitations as well:

HUMINT is often the best source for intelligence many host nations possess. Often, host-nation reconnaissance and surveillance aircraft lack the means of collecting intelligence through thermal imaging and most are incapable of exploiting the electromagnetic medium beyond a very limited capacity for communications intercept. Generally, collection is limited to visual and photographic means. That said, usually only a limited number of air platforms are configured for photoreconnaissance. Even where intelligence resources and programs and a viable cadre of intelligence professionals exist, the lack of efficient procedures for timely dissemination of tactical intelligence often degrades overall mission effectiveness.²³

AFDD 2-3.1 highlights airpower lessons learned in combating dispersed forces:

Airpower can contribute most effectively to security and neutralization when it functions as an integrated, joint component of the overall internal defense effort. It is least effective when employed unilaterally as a substitute for ground maneuver or long-range artillery. In many instances, airpower can be exploited to greatest advantage by emphasizing surveillance and logistics mobility over firepower. Where insurgents are unwilling to concentrate their forces and are integrated within the civilian population, they present poor targets for air attack. The application of firepower, an errant bomb, loss of civilian life, or damage to civilian property can be used against the government and provide increased

²¹ James S. Corum and Wray R. Johnson, *Airpower in Small Wars: Fighting Insurgents and Terrorists* (Lawrence, K.S.: University Press of Kansas, 2003), 246-247.

²² Johnson, “Ends Versus Means.”

²³ AFDD 2-3.1, 13.

support for the insurgents. Air support for security and neutralization should be used primarily to inform, deploy, sustain, and reinforce surface elements of the internal security force. The emphasis on surveillance and mobility also applies to military operations performing counterdrug activities and to government actions suppressing terrorism and aggravated forms of civil disorder. For instance, where friendly lives and property are at risk from insurgent attack, airpower can serve as a component of a coordinated joint security and neutralization effort aimed at creating a safe environment for development programs which, in turn, promote and sustain mobilization. Airpower can demonstrate to the population that the legitimate government is in control.²⁴

Although the above lessons are valuable, the USAF has yet to demonstrate or prove these lessons effective in countering the Iraqi insurgency. Major William Downs, a member of the 6th Special Operations Squadron, explains, “In general, the Air Force has left the training, advising, and assisting of foreign forces to the Army or civilian contractors.” Major Downs claims that USAF “combat aviation advisors have played no part in building the Iraqi Air Force,” even though the US Army is pursuing a new surveillance aircraft for the Iraqi Air Force.²⁵

²⁴ AFDD 2-3.1, 16.

²⁵ Major William Brian Downs, USAF, “Unconventional Airpower,” *Air & Space Power Journal*, vol. XIX, no. 1 (Spring 2005): 22.

Chapter 2

The Nature Of Dispersed Force Operations

If the enemy attacks, I disappear; if he defends, I harass; and if he retreats I attack.

—Mao Tse-tung

God is its goal; The messenger is its leader. The Quran is its Constitution. Jihad is its methodology, and death for the sake of God is its most coveted desire.

—The Motto of the Islamic Resistance Movement
Article 8, The Hamas Charter

Jihad, bullets and martyrdom operations are the only way to destroy the degradation and disbelief which have spread in the Muslim lands.

—Al Qaeda recruitment video

To develop a better understanding of the nature of dispersed forces and their operations, this chapter explores groups that have exploited tactics of dispersal and hiding. The following discussion identifies the purposes and objectives, professed strategies, organization, and support of Vietnamese communists, Hamas, Iraqi insurgents, and al Qaeda.

Vietnamese Communists

This section describes the purpose and objectives, strategy and organization, and support of Vietnamese communists encountered by American forces during the Vietnam War. Significant influences upon the Vietnamese communists before and during this time period, such as Ho Chi Minh and Mao Tse-Tung, are also included.

Purpose And Objectives

Ho Chi Minh's overall objective was to reestablish Vietnam's national independence. Born into a culture subjected to cyclical invasions, occupations, and rebellions, Ho Chi Minh expressed as early as 1930 the objective of a Vietnamese "people's national-democratic revolution" to "overthrow French colonialism" and "win back national independence."²⁶ Ho realized that he and his Vietnamese countrymen did not have the resources or military capabilities to drive out the French colonialists (or, later the Japanese, the French again, and still later the Americans) in a toe-to-toe

²⁶ Douglas Pike, *PAVN: People's Army of Vietnam* (Novato, C.A.: Presidio Press, 1986), 14.

conventional war. In 1960 Ho persisted in calling for the “reunification of Vietnam” as a “national objective” through the Preamble of the Constitution of the Democratic Republic of Vietnam.²⁷ Thus, given the resources available, Ho adapted Maoist based protracted revolutionary war (insurgency) as a practical means to his desired end of independence. The Vietnamese adaptation of protracted revolutionary war strategy was called *dau tranh* (struggle).²⁸

Strategy And Organization

To the Vietnamese communists *dau tranh* was the “siren call of consecration, the summons to noble duty, the promise of eventual utopia.”²⁹ *Dau tranh* involved all the people and essentially became their way of life. Foreign to western thought, this meant all, to include women and children, were instruments of war and combatants.³⁰ This struggle enveloped life and time stressing endurance no matter how long. All actions taken by the Vietnamese communists, from political decisions to a peasant’s work, were part of *dau tranh*.

Dau tranh strategy married violence to politics. The objective was to put “armed conflict into the context of political dissidence.” Always “cast in a political context,” armed *dau tranh* involved all military and revolutionary violence to include “institutionalized assassination, kidnapping, and other activity not normally associated with the formal armed forces of a country.” Political *dau tranh* concerned “systematic coercive activity” that included the “motivation, social organization, communication of ideas, and mobilization of manpower and support.”³¹

Mao’s well-known three stages of guerrilla warfare inspired armed *dau tranh*. In the first stage, the guerrilla “hits, runs, and hides” while the enemy “seeks to find and destroy him.”³² Essentially a strategic retreat, the “weaker force conserves its strength”

²⁷ *The Pentagon Papers: The Department of Defense History of United States Decisionmaking on Vietnam*, Senator Gravel Edition, (Boston: Beacon Press, 1971), vol. 1, chapter 5, “Origins of the Insurgency in South Vietnam, 1954-1960,” 242-269.

²⁸ Pike, 215.

²⁹ Pike, 217.

³⁰ Samuel B. Griffith II, *Mao Tse-Tung on Guerrilla Warfare* (Baltimore, M.D.: The Nautical & Aviation Publishing Company of America, 1992), 48-50; and Pike, 215.

³¹ Spencer C. Tucker, editor, *Encyclopedia of the Vietnam War: A Political, Social, and Military History* (New York, N.Y.: Oxford University Press, 2000), 92; and Pike, 217, 222, 233.

³² Pike, 224.

while the “party organizes the population through propaganda.”³³ This stage also involves a massive recruiting effort to build local guerrilla forces that will eventually become a part of an even larger force. Stage one is a period of development and organization. In stage two, or what Mao called “strategic stalemate,” insurgent forces pursue organizational growth while escalating the violence and bleed the enemy through attrition to achieve equilibrium with government forces. Stage three, “the beginning of the end,” eventually develops into a conventional offensive to force government forces into an “all-out defensive battle.”³⁴ If the government “is defeated by armed *dau tranh*, it loses the war;” but if the government “defeats armed *dau tranh*, it does not win the war. To win it has to defeat both armed *dau tranh* and political *dau tranh*.”³⁵

After the disastrous losses of the premature stage three Tet Offensive in 1968, the Vietnamese communists reformed their strategy to focus on stage two thus avoiding US conventional strength while hiding and dispersing lucrative targets. Further, they limited their offensive actions to attacks by highly trained and well-organized sapper teams or super guerrillas. Their purpose “was not to decimate the enemy’s military force but to occupy it, wear it out, limit its initiative.”³⁶

Underpinning the success of all the stages, political *dau tranh* encompassed three programs: action among the people controlled by the enemy, action among the enemy military and civil servants, and action among the people under communist control. Action among the enemy focused on the South Vietnamese people in Vietnam as well as the American public 10,000 miles across the Pacific. Although this effort involved mass media, the chief mechanism was “the social movement used as a channel of communication.” This social movement exploited well-organized struggle meetings to educate the masses (village by village) on revolutionary politics, governmental grievances, and the need for social solidarity. To boost social solidarity, communist leaders initiated demonstrations and other nonmilitary action to affect specific outcomes (e.g. to degrade the South Vietnamese government or enlist support of antigovernment noncommunists). The communists planned these actions to demonstrate the power of

³³ Griffith, 18.

³⁴ Griffith, 18; and Pike, 224-225.

³⁵ Pike, 227.

³⁶ Pike, 228.

“organized mass action.”³⁷ They stressed advance planning and party control by avoiding any event diluted by other groups’ agendas or driven by a spontaneous emotional response. Reflecting stage one and two efforts from 1960 to 1965, the National Liberation Front (NLF), the Viet Cong’s “administrative apparatus—popularly referred to as the ‘VC shadow government,’” reported that these struggle meetings grew from 1,170 with 65,000 in attendance in 1960 and 1961 to 11,000,000 with 91,000,000 attending in 1965.³⁸ *The Pentagon Papers* also included reports that after the NLF was created in 1960, “it quadrupled its strength in about one year.”³⁹

Having learned much from executing political *dau tranh* against the French, their strategy also sought to fight the United States on its home front. Strategically, *dau tranh* sought to convince Americans that “victory in Vietnam was impossible” so as to undermine domestic and international support, and tactically, to nullify US power by “inhibiting full use of American military capability” (e.g. airpower). To accomplish this, “Hanoi hosted delegations of sympathetic Americans, released prisoners of war directly to representatives of the antiwar movement, sent delegates to international conferences, and with the help of the alternative news media publicized their diplomatic initiatives.”⁴⁰

Using press statements, newsreel, documentaries, and publications, the Vietnamese communists propagandized their ‘noble’ war aims and “desire for peace” as well as South Vietnamese government corruption and the brutality of US airpower. Spreading their message from US college campuses to the international community, the communists exploited public perception to present themselves as “a tough...sometimes ruthless, but essentially attractive society” in pursuit of “justice, peace, democracy, and possibly unification” from a domestic and defensive stance. Masterfully making the most of international politics and diplomacy, to include ties with China and the Soviet Union,

³⁷ Tucker, 92; and Pike, 236-240.

³⁸ Admiral U.S.G. Sharp and General W.C. Westmoreland, *Report On The War In Vietnam* (Washington, D.C.: U.S. Government Printing Office, 30 June 1968), 203; and Pike, 238. The specific numbers associated with the meetings are likely to be inflated, but as discussed by Pike, it reflects the importance placed on this social movement.

³⁹ *The Pentagon Papers*, vol. 1, chapter 5, 242-269, and 346, which states, “The National Liberation Front was not simply another indigenous covert group, or even a coalition of such groups. It was an organizational steamroller, nationally conceived and nationally organized, endowed with ample cadres and funds, crashing out of the jungle to flatten the [Government of (South) Vietnam] GVN.”

⁴⁰ Marilyn Young, “Ho, Ho, Ho Chi Minh, Ho Chi Minh Is Gonna Win!” in *Why the North Won the Vietnam War*, ed. Marc Jason Gilbert (New York, N.Y.: Palgrave, 2002), 226.

the Vietnamese communists pursued political manipulation of US public opinion to decrease support for the war and to limit America's use of airpower.⁴¹

The second political program, action among the enemy military and civil servants, aimed to weaken the enemy military and government through communication or informational means. Hoping to "induce desertion or defection" and lower enemy morale, special cadres penetrated the South Vietnamese military and government "to spread dissension from within." These cadres also exploited blood ties, friendships, rewards, and leniency toward captured officials and officers to influence the enemy.⁴²

The third program, action among the people under communist control, established communist governmental legitimacy in "liberated, or safe-haven" areas.⁴³ This action not only sought to strengthen communist social and governmental legitimacy, but also to motivate recruitment and financial support.

Organization was the most important aspect of *dau tranh* strategy. This "resistance organization" involved a "hierarchy extending upward from hamlet and village through provincial to regional authorities capable of coordinating action on a broad scale."⁴⁴ Organization, as the channel of communication, made mobilization of the people possible. With mobilization came the motivation of the people. More important than "ideology or military tactics," this organizational structure enabled the people to fight and then disperse and hide until the opportune time to seize power. The ability to organize and to remain organized while disorganizing the enemy was the key to victory.⁴⁵

Support

"To keep the organization functioning," explains Marine Major Johnie Gombo, "the guerrillas rely on internal and external support. Major Gombo's analysis of Vietnamese guerrilla warfare concluded:

The internal support is from the local populace, and is primarily personnel, medical care, food, and intelligence. The external support is from governments whose views parallel those of the guerrillas. The external

⁴¹ Young, 224-227; and Pike, 236-240; and Robert K. Brigham, *Guerrilla Diplomacy: The NLF's Foreign Relations and the Viet Nam War* (Ithaca, N.Y.: Cornell University Press, 1998), 61, 91-92.

⁴² Pike, 244.

⁴³ Pike, 245.

⁴⁴ *The Pentagon Papers*, vol. 1, chapter 5, 314-346.

⁴⁵ Tucker, 92; and Pike, 221.

support may be similar to the internal support, but will include weapons, and possibly, a safe haven. The weapons from an external government will augment those the guerrillas have taken from the enemy. The safe haven is very important to the guerrillas when protection from enemy forces is required.⁴⁶

Most of the support and supplies needed by Vietnamese communists in South Vietnam were acquired from or provided by the local population. The communists' internal support reduced their external needs to "only 34 tons a day" which could be provided easily by seventeen 2 ½-ton trucks.⁴⁷

Hamas

For an Islamic militant, *jihad* expresses a meaning similar to *dau tranh*. *Jihad* "has been variously interpreted to mean moral striving and armed struggle."⁴⁸ The greater and lesser *jihads* involve personal and community struggles respectively that impact all aspects of life.

Purpose And Objectives

Hamas, "a militant Islamic organization committed to the establishment of an Islamic Palestinian state" has committed itself to *jihad* against Israel. Hamas claims it is in a "holy war" with Israel, "which they see as a military occupying power, and that its use of force against Israeli targets is therefore legal."⁴⁹ Article 15 of *The Hamas Charter* states, "When an enemy usurps a Muslim land, then jihad is an individual religious duty on every Muslim; and in confronting the unlawful seizure of Palestine by the Jews, it is necessary to raise the banner of jihad." Article 15 also explains that Hamas intends "to instill in the minds of Muslim generations that the Palestinian cause is a religious cause."⁵⁰

⁴⁶ Major Johnie Gombo, "Understanding Guerrilla Warfare," Marine Corps University Command and Staff College Thesis, 1990, n.p., on-line, Internet, 23 January 2005, available from <http://www.globalsecurity.org/military/library/report/1990/GJ.htm>.

⁴⁷ Mark Clodfelter, *The Limits of Airpower: The American Bombing of North Vietnam* (New York, N.Y.: The Free Press, 1989), 134-135.

⁴⁸ Bernard Lewis, *The Crisis of Islam: Holy War and Unholy Terror* (New York: The Modern Library, 2003), 30.

⁴⁹ James P. Wooten, "Hamas: The Organization, Goals, and Tactics of a Militant Palestinian Organization," *CRS Report for Congress* (Congressional Research Service: The Library of Congress, 19 August 1993), i.

⁵⁰ Khaled Hroub, *Hamas: Political Thought and Practice* (Washington, D.C.: Institute for Palestine Studies, 2000), 276-277.

Hamas, “an acronym for the Arabic phrase meaning ‘Islamic Resistance Movement,’” began as a wing of the Muslim Brotherhood in 1967, and in 1987 was founded as the organization it is today. The founding Hamas leaders’ goal was to “become directly involved in the intifada and ultimately gain control of the Palestinian movement and bring it more in line with fundamentalist Islamic thought.”⁵¹

Hamas states its goals in article 9 of *The Hamas Charter*:

The Islamic Resistance Movement has developed at a time when the absence of the spirit of Islam has brought about distorted judgement and absurd understandings. Values have lost meaning, a plague of evil doers, oppression, and darkness has become rampant, and cowards have become ferocious. Nations have been occupied, their people expelled and fallen down. The state of truth has disappeared and the state of evil has been established; as long as Islam does not take its rightful place in the world arena, everything will continue to change for the worse. The goal of the Islamic Resistance Movement, therefore, is to conquer evil, crushing it and defeating it, so that truth may prevail, so that the country may return to its rightful place, and so that the call may be heard from the minarets proclaiming the Islamic state. And aid is sought from God.⁵²

Denying that it is a terrorist organization, Hamas has expressed the organization’s political identity as “a popular struggle movement that seeks to liberate Palestine ... from the Mediterranean Sea to the River Jordan” and “it bases its ideology and policies on the teachings of Islam and its juridical tradition.”⁵³ On the other hand, numerous nations (e.g. the United States, the nations of the European Union, Canada, and Israel) have identified Hamas as a terrorist organization.⁵⁴

Strategy

⁵¹ Wooten, i, 1. Intifada means “uprising” and references the demonstrations that were occurring in the occupied territories in 1987.

⁵² Hroub, 272.

⁵³ Hroub, 295.

⁵⁴ Wooten, i, U.S. Department of State, “Foreign Terrorist Organizations,” Office of Counterterrorism Fact Sheet, Washington, D.C., 29 December 2004, n.p., on-line, Internet, 3 May 2005, available from <http://www.state.gov/s/ct/rls/fs/2004/37191.htm>; United Nations Press Release GA/10152, “General Assembly, Meeting In Resumed Emergency Special Session, Demands Israel Not Deport Or Threaten Safety Of Yasser Arafat,” 19 September 2003, n.p., on-line, Internet, 3 May 2005, available from <http://www.un.org/News/Press/docs/2003/ga10152.doc.htm>; and United Nations Press Release SC/7359, “Council Hears Renewed Calls For Implementation Of Its Resolutions, Dispatch Of International Monitoring Force To Middle East,” 9 April 2002, n.p., on-line, Internet, 3 May 2005, available from <http://www.un.org/News/Press/docs/2002/SC7359.doc.htm>.

Hamas reveals its strategy in its *Islamic Resistance Movement (Hamas) Introductory Memorandum*, which states:

1. The Palestinian people, being the primary target of the occupation, bears the larger part of the burden in resisting it. Hamas, therefore, works to mobilize the energies of this people and to direct it toward steadfastness.
2. The field of confrontation with the enemy is Palestine, the Arab and Islamic lands being fields of aid and support to our people, especially the lands that have been enriched with the pure blood of martyrs throughout the ages.
3. Confronting and resisting the enemy in Palestine must be continuous until victory and liberation. Holy struggle in the name of God is our guide, and fighting and inflicting harm on enemy troops and their instruments rank at the top of our means of resistance.
4. Political activity, in our view, is one means of holy struggle against the Zionist enemy and aims to buttress the struggle and steadfastness of our people and to mobilize its energies and that of our Arab Islamic nation to render our cause victorious.⁵⁵

Organization

Hamas' three-layered operational organization involves a political-military command level, an intermediate level, and ground troops. The political-military command "consists of a small group, no more than a dozen activists, responsible for funding, political and spiritual guidance, and direction of the organization's strategy."⁵⁶ With some in the West Bank and Gaza Strip and others outside to avoid arrest, these principal leaders "share responsibility for decision making" through consultation and collective effort.⁵⁷ The intermediate level is made up of "a few dozens in each Palestinian city" loosely connected as a network of cells to plan operations, recruit, train, arm, and dispatch terrorists. The ground troops "are those recruited to be the actual perpetrators of either suicide operations" or "shooting attacks in Israeli population centers." The ground troops are not privy to Hamas secrets and are told little about Hamas organizational structure.⁵⁸

⁵⁵ Hroub, 296-297.

⁵⁶ Gal Luft, "The Logic of Israel's Targeted Killing," *Mid East Quarterly* X, no. 1 (Winter 2003): 6.

⁵⁷ Hroub, 58.

⁵⁸ Luft, 6.

According to Emaad Abdul-Hameed Al-Falooji, a former member of the Palestinian Muslim Brotherhood and senior adviser to Hamas (he left Hamas in 1996 to participate in Palestinian elections and became the Minister of Post and Telecommunications in the Palestinian Authority), the organization has five apparatuses: Events, Media, Security, Military, and Helpers. The Al-Ahdaath (Events) Apparatus “is responsible for coordinating events on the street, organizing turnouts for demonstrations, funerals of martyrs, and commemorations of special events.” It is the “eyes of Hamas leaders” reporting “street developments and mass protests to help leaders decide what level of escalation to employ.”⁵⁹

The Al-Ilaami (Media) Apparatus is the ears and mouthpiece of Hamas. It “monitors the international media to gauge what effect mass demonstrations and suicide bombings have on Arab and world public opinion” and “issues communiqués to the worldwide media,” particularly to highlight Israeli atrocities (e.g. F-16 and attack helicopter strikes). To accomplish this as well as report for Hamas’ publications and website, the Media apparatus trains and maintains its own journalist corps. The Media section also “produces all internal publications for its members, and it prepares reports and lessons-learned on operations and certain studies commissioned by Hamas leadership.”⁶⁰

The Al-Amn (Security) Apparatus is “responsible for preventing infiltration by Israeli agencies, informants, or Palestinian groups wanting to undermine Hamas. Al-Amn develops detailed security plans and trains members in operational security; conducts background checks on all those wishing to join the movement; and undertakes surveillance of suspected collaborators and Palestinians who are contacted by the Israelis.”⁶¹ Security also involves the protection of Hamas leadership and countering information breaches from Israeli sweeps or capture of Hamas members.

The Al-Askary (Military) Apparatus is estimated to have “12 military groups, each consisting of three to five people geographically dispersed throughout the West

⁵⁹ Youssef H. Aboul-Enein, “Hamas, understanding the organization,” *Military Review*, July-August 2003, n.p., on-line, Internet, 23 January 2005, available from http://www.findarticles.com/p/articles/mi_m0PBZ/is_4_83/ai_109268865. This article is based on Al-Falooji’s book, “Pinprick Strikes: Hamas, the Intifadah and Leadership” (Dar-al-Shirook Press, Nablus, Gaza and Ramalah, translated by Youssef H. Aboul-Enein, 2002).

⁶⁰ Aboul-Enein.

⁶¹ Aboul-Enein.

Bank and the Gaza Strip. In addition to the 12 groups, five groups were held in reserve in case a cell was discovered. The groups were trained in firearms, demolitions, kidnapping, and suicide missions.” Employing one cell per month, Hamas prepared to conduct “12 operations a year, giving each cell a 1-year rotation to plan, train, rehearse, and recruit for an operation. The group conducted training on purchased land with underground training sites and firing ranges.”⁶²

Al-Falooji identified four major objectives of the Hamas military arm that guide the use of “suicide operations, guerrilla action, and terror campaigns”:

- * To conduct painful strikes within Israel to ensure the Israeli government knows there are consequences to attacking Palestinian civilians.
- * To conduct military operations to attract the attention of the world and the United Nations to force a solution to the Palestinian problem.
- * To conduct strikes to raise the morale of the Palestinian people and to assert its authority on the street.
- * To conduct military strikes against the Israeli people to send the message that they have no place in Palestine and that they cannot easily attain the security they desire.

The Ansar (Helpers) Apparatus involve “Palestinians who are not full members of Hamas but who can participate and assist in the movement's activities.” If a helper wants to become a full member of Hamas, they must demonstrate devout practice to Islamic rituals, complete an 18-month indoctrination period, and pass a rigorous security check. Once Hamas accepts them as a full member, they are placed in a given cell to perform work as described in these apparatuses (based on their talents).⁶³ Hamas’ recruitment methods and organizational structure provide a dispersed and hidden force difficult to infiltrate.

Support

Hamas quickly won support among the “Muslim population of the Gaza Strip and the West Bank” largely because of “its Islamic origins and earlier activities as a religious and charitable institution.” Hamas’ Islamic fundamentalist movement “set it apart” from the more secular PLO and rallied Muslims to its cause. In addition, Hamas likely gained

⁶² Aboul-Enein.

⁶³ Aboul-Enein.

popular support from Palestinians frustrated with the PLO's inability to advance the establishment of a Palestinian state.⁶⁴

Recognized as a religious and charitable institution, Hamas performs educational and social activities that qualify it to receive "donations required by Islamic law from the Muslim community (zakat)." "According to some sources," states a Congressional report, "a large amount of money is coming from devout Muslims in Saudi Arabia and the Gulf states who used to contribute to the PLO before it sided with Iraq during the Gulf War."⁶⁵

Regional governments have also provided support to Hamas. The Jordanian government has permitted Hamas "to maintain offices in Amman and operate openly as a foreign political organization."⁶⁶ Iran provides substantial support to Hamas as well as other Sunni and Shi'a terrorist organizations. Iran uses groups such as the militant Islamic Revolutionary Guard Corps (IRGC) and *Bonyads* (financial institutions) to provide Hamas financial support and varying degrees of training, weapons, explosives, and organizational aid. Striving to influence Hamas and its actions, Iran has "stepped up shipments of weapons to Hamas in recent years" as well as trained and "coordinated groups working against Israel."⁶⁷

Iraqi Insurgents

The most prominent insurgents in Iraq as of this writing, e.g. those providing the greatest resistance, are the Sunni groups. Baathists who were formerly in power lead some of these groups while Jordanian national and terrorist Abu Musab al-Zarqawi leads others.

Purpose And Objectives

Some Baathist Iraqi insurgents hold credibility as past governmental leaders and appeal to Iraqis who preferred the former regime. Zarqawi's Sunni extremists promote an Islamic theocracy under Sharia law. Pledging allegiance to al Qaeda and Osama Bin Laden in October 2004, Zarqawi leads Tawhid wa Jihad, meaning monotheism and holy struggle. The Sunni groups Ansar al-Islam, which splintered off from al Qaeda in August

⁶⁴ Wooten, 1-2.

⁶⁵ Wooten, 2.

⁶⁶ Wooten, 2.

⁶⁷ Daniel Byman et al., *Iran's Security Policy in the Post-Revolutionary Era* (National Defense Research Institute: RAND, 2001), 93.

2001, and Ansar al Sunnah, an offshoot of Ansar al-Islam, have joined forces with Zarqawi.⁶⁸

Although these insurgent groups have different end states in mind for Iraq, all share one common purpose and objective. As captured by the stated goals of Ansar al Sunnah, these insurgent groups intend to “rid Iraq of all US and coalition forces.” Ansar al Sunnah also stated intentions to target “US and coalition forces and anyone who is believed to be working in cooperation with the west, including the citizens of Iraq.”⁶⁹

Strategy

As of this writing, none of the Iraqi insurgent groups have professed a strategy publicly. In regards to an Iraqi end state, the Baathist insurgents appear to be trying to restore their power while the Sunni extremist insurgents desire an Islamic theocracy under Sharia law. Sunni insurgent groups’ actions in threatening Iraqi elections and population security seem to indicate an effort to destabilize Iraq and delegitimize the new government. Unable to win militarily, the insurgents likely are trying to “inflict political pain.” Insurgents seem to have assumed that if “they kill enough Americans,” says Ken Pollack of the Saban Center on Middle East Policy at the Brookings Institution, “the Americans will leave Iraq.”⁷⁰

The Sunni insurgents likely are adjusting their strategy. Beginning in March 2005, Sunni insurgents shifted a majority of their attacks away from US and Coalition forces to Shiite civilians and military recruits. Iraqis, such as “analysts, merchants, professors, soldiers, clerics, and politicians,” have “indicated concern that the violence is shifting toward a fight between religious sects” as a means to divide the country through civil war.⁷¹

It is likely that Iraq’s previous Baathist leadership, mostly Sunnis, are directing, coordinating, and/or supporting many of the Sunni insurgent groups. According to a

⁶⁸ Adam Ereli, US State Department Press Statement, Washington, D.C., 28 December 2004, n.p., on-line, Internet, 17 January 2005, available from <http://www.state.gov/r/pa/prs/ps/2004/40081.htm>; and Northeast Intelligence Network website, n.p., on-line, Internet, 16 January 2005, available from <http://www.homelandsecurityus.com/terrorgroups.asp>.

⁶⁹ Northeast Intelligence Network website.

⁷⁰ Brian Todd, “Insurgent Strategy,” CNN, 8 November 2004, n.p., on-line, Internet, 24 January 2005, available from <http://www.cgi.cnn.com/2004/US/11/08/insurgent.strategy/>.

⁷¹ Tom Lasseter, “U.S. casualties drop; Attacks on Iraqi rise,” Knight Ridder News Service, *The Miami Herald* and USAF Aimpoints, 23 March 2005.

Newsweek investigation, “Saddam had put aside hundreds of millions of dollars... and enormous weapons caches to support a guerrilla war” prior to Coalition forces entering Iraq on 20 March 2003. In addition, Saddam issued a circular to top leadership stating, “‘Iraq will be defeated militarily due to the imbalance in forces,’ but could prevail by ‘dragging the U.S. military into Iraqi cities, villages and the desert and resorting to resistance tactics.’” Now, a “top Iraqi police official” as well as “jihadi foot soldiers” claim, “Zarqawi’s people supply the bombers, the Baathists provide the money and strategy.”⁷² In addition, General George W. Casey Jr., as the US commander in Iraq, claimed former governing members of Saddam Hussein’s regime are “operating out of Syria with impunity and providing direction and financing for the insurgency.”⁷³

Organization

The insurgent groups compose themselves in very small cells of two or three people. Dana Ahmed Majid, the head of security for the Patriotic Union of Kurdistan (PUK), states, “Each cell has an ‘emir.’” The emir is the leader with decision-making powers to order bombings or attacks. Majid explains that group communication occurs mostly via the Internet as “telephone communications in Iraq are difficult, but the Internet is everywhere.” Sadi Ahmed Pire, head of security for the PUK’s Mosul office, claims that the insurgent networks provide good intelligence thus allowing Zarqawi and other leaders to avoid capture. Pire explains:

The point of strength of the terrorist is information. They have exact information. They have people in every office, every department - police, Iraqi National Guard, Health Ministry, education, electricity, and municipality. And the people cooperate with them - sometimes willingly, sometimes not.⁷⁴

Major James West, an intelligence officer with the First Marine Expeditionary Force in Iraq, claimed, “There are so many ways Iraqis are tied together—by tribe, business dealing, family, religion or where they live.” The insurgents have used these

⁷² Rod Nordland, Tom Masland, and Christopher Dickey, “Unmasking the Insurgents,” *Newsweek*, 7 February 2005, 24.

⁷³ Thomas E. Ricks, “General: Iraqi Insurgents Directed From Syria,” *The Washington Post*, 17 December 2004, A29.

⁷⁴ Annia Ciezadlo, “Fragmented leadership of the Iraqi insurgency,” *The Christian Science Monitor*, csmonitor.com, 21 December 2004, n.p., on-line, Internet, 17 January 2005, available from <http://www.csmonitor.com/2004/1221/p01s03-woiq.html>.

connections to pass information as well as identify those who are collaborating with Coalition forces. The insurgents then use intimidation, from personal threats to car bombs, to prevent Iraqis from working with or assisting the Coalition.⁷⁵

In addressing the challenge of identifying Iraqi insurgent organization, Major West stated, “There are distinct groups, but there’s no single goal or single leader... some are politically motivated, like the Baathists, some are criminals, some religious zealots, and sometimes they work with each other and sometimes not.”⁷⁶ Regardless of each group’s exact composition, it is evident they are operating in a dispersed fashion, hiding among the population to evade detection, and networking to avoid being targeted by Coalition forces.

Support

The Iraqi insurgents have exploited the urban environment as a safe haven. Insurgents dress as noncombatants and blend into the urban population as needed to avoid being targeted. Insurgents also avoid massing except in areas that lack US or Coalition forces, e.g. Fallujah prior to US operations into Fallujah at the end of 2004. The insurgents’ ability to disperse and hide among the population implies some degree of popular support. The insurgents likely garner this support from some willingly and from others through coercive measures.

Iraqi insurgents have also received external support. In an appeal given on 22 August 2004, “Ninety-three prominent Muslim figures,” representing nearly 30 nations, opposed the presence of US forces in Iraq and called on Muslims “around the world to support resistance to US forces and to the Iraqi government.” The appeal stated, “The aim should be to ‘purify the land of Islam from the filth of occupation.’”⁷⁷

Some external support may be more harmful than helpful to the Iraqi insurgents. Ansar al Sunnah, mostly made up of Iraqi nationals and defining “itself as both nationalist and Islamic,” directed “foreign militants to stop coming” via its website and claimed it “needed money, not more recruits.” Revealing that some support may be problematic, Iraqi national security adviser Mouwafak al-Rubaie, claims, “We have

⁷⁵ Nordland, Masland, and Dickey, “Unmasking the Insurgents,” 26-27.

⁷⁶ Nordland, Masland, and Dickey, “Unmasking the Insurgents,” 26.

⁷⁷ Reuters, “Senior Muslim figures back Iraqi insurgents,” Australian Broadcasting Corporation, 23 August 2004, n.p., on-line, Internet, 24 January 2005, available from <http://www.abc.net.au/news/newsitems/200408/s1182542.htm>.

concrete information that a sharp division is now broiling between' Iraqis waging a nationalist war and foreign Arabs spurred by militant Islam.”⁷⁸

Al Qaeda

Al Qaeda is a “loose umbrella organization of semi-autonomous terrorist groups and organizations with [Osama] bin Laden providing guidance, coordination, and financial and logistical facilitation.”⁷⁹ Al Qaeda’s global network structure “enables it to wield direct and indirect control over a potent, far-flung, force.” Bin Laden uses “periodic pronouncements, speeches and writings” to indoctrinate, train and control “a core inner group as well as” inspire and support “peripheral cadres.” Bin Laden also “seeks to influence” the thought and behavior of Islamic groups, parties and regimes worldwide.⁸⁰

Purpose And Objectives

In February 1998 bin Laden issued a fatwa (declaration or order) to all Muslims that stated:

In compliance with God’s order, we issue the following fatwa to all Muslims: The ruling to kill the Americans and their allies – civilians and military -- is an individual duty for every Muslim who can do it in any country in which it is possible to do it, in order to liberate the al-Aqsa Mosque and the holy mosque [Mecca] from their grip, and in order for their armies to move out of all the lands of Islam, defeated and unable to threaten any Muslim. This is in accordance with the words of Almighty God, “and fight the pagans all together as they fight you all together,” and “fight them until there is no more tumult or oppression, and there prevail justice and faith in God.” We -- with God’s help -- call on every Muslim who believes in God and wishes to be rewarded to comply with God’s order to kill the Americans and plunder their money wherever and whenever they find it.⁸¹

⁷⁸ Associated Press, “Iraqi insurgents fear bin Laden’s moves,” CNN.com website, 12 January 2005, n.p., on-line, Internet, 17 January 2005, available from <http://www.cnn.com/2005/WORLD/meast/01/12/iraq.bin.laden.ap/>.

⁷⁹ Jerrold M. Post, “Killing In The Name Of God: Osama Bin Laden And Al Qaeda,” *Know Thy Enemy: Profiles of Adversary Leaders and Their Strategic Cultures* (Maxwell AFB, A.L.: USAF Counterproliferation Center, July 2003), 30.

⁸⁰ Rohan Gunaratna, *Inside al Qaeda: Global Network of Terror* (New York: Columbia University Press, 2002), 56-57.

⁸¹ Post, 24.

Although this fatwa reveals al Qaeda's goal to remove Western armies and presence from all the lands of Islam, bin Laden's "ultimate goal is the reestablishment of the Caliphate" in a Muslim dominant world.⁸² Generating a void in the Islamic world, the last caliph ("the head of all Sunni Islam" that "dated back to the death of the Prophet Muhammad in 632 C.E.") was abolished by the Turks in 1924 after the fall of the Ottoman sultanate ("the last of the great Muslim empires") in 1918. In his 7 October 2001 videotape, bin Laden referred to this loss of the Caliphate as "the 'humiliation and disgrace' that Islam has suffered for 'more than eighty years.'"⁸³

Desiring a legitimate Sunni Caliph, bin Laden "began supporting campaigns against 'false' Muslim rulers (e.g. Saudi Arabia, Egypt, Tajikistan, Uzbekistan, Algeria) and assisting Muslims victimised by non-Muslim regimes (e.g. Philippines, Kashmir, Bosnia and Chechnya)." Al Qaeda also "forged a coalition linking fellow militant Islamists, from the Abu Sayyaf Group of the Philippines to the Islamic Group of Egypt and the [Armed Islamic Group] GIA. Those al Qaeda cadres who were dispatched to help these causes were vanguard fighters and the most accomplished trainers."⁸⁴

Strategy

Shedding light to the motivation behind striking the Twin Towers on 11 September 2001, bin Laden explains, "It had never occurred to us to strike the towers. But after it became unbearable and we witnessed the oppression and tyranny of the American/Israeli coalition against our people in Palestine and Lebanon, it came to my mind." Although this speaks of retribution for the perceived wrongs done by America and Israel, bin Laden also seeks to attrit US economic power. In a videotape sent to Al Jazeera on 30 October 2004, bin Laden states, "We are continuing this policy in bleeding America to the point of bankruptcy."⁸⁵

Al Qaeda is "building a multinational alliance of terrorist groups. Advancing the concept of the universality of the battle, it is seeking to widen the conflict from the territorial to the global, countering US initiatives by expanding its existing alliance made

⁸² Gunaratna, 55-56

⁸³ Lewis, xv-xvii. This book provides a good synopsis of the importance and history of the Caliphate.

⁸⁴ Gunaratna, 55-56.

⁸⁵ Aljazeera.net, "Full transcript of bin Laden's speech," 30 October 2004, n.p., on-line, Internet, 17 January 2005, available from <http://english.aljazeera.net/NR/exeres/79C6AF22-98FB-4A1C-B21F-2BC36E87F61F.htm>.

up of the ‘jihad movements in the various lands of Islam.’” To quote Dr Ayman Al-Zawahiri, al Qaeda’s chief strategist, the alliance represents:

A growing power that is rallying under the banner of jihad for the sake of God and operating outside the scope of the new world order. It is free of the servitude for the dominating western empire. It promises destruction and ruin for the new Crusades against the lands of Islam. It is ready for revenge against the heads of the world’s gathering of infidels, the United States, Russia and Israel. It is anxious to seek retribution for the blood of the martyrs, the grief of the mothers, the deprivation of the orphans, the suffering of the detainees, and the sores of the tortured people throughout the land of Islam, from Eastern Turkestan to Andalusia.⁸⁶

Portraying the post 9/11 war in Afghanistan as a “battle of ‘Islam against infidelity,’” al Qaeda sought to mobilize the “Muslim nation.” As Islamic movements offered little support right after 9/11, al Qaeda emphasized “the need for perseverance, patience, steadfastness and adherence to a firm set of principles.” Al Qaeda points to the Koran, which states, “O ye who believe, endure, outdo all others in endurance, be ready, and observe your duty to Allah, in order that ye may succeed.”⁸⁷

As US forces entered Afghanistan, al Qaeda “anticipated how the US would use intergovernmental, governmental and non-governmental actors to strengthen its position in Afghanistan, especially in order to alleviate the suffering of the Afghan people.” Designating these actors as Western “tools to fight Islam,” al-Zawahiri targeted the “United Nations, Muslim regimes that work with the west, multinational corporations, international communications and data exchange systems, international news agencies and satellite media channels, and international relief agencies.”⁸⁸

Continuing on a path of endurance in a protracted struggle, al Qaeda’s “post 9/11 strategy is designed for Islamist parties hiding behind the political veil to produce a generation of recruits and supporters to sustain the fight in Afghanistan and elsewhere. Until favourable conditions emerge, al Qaeda will operate through mosques, madrasas, community centres and, as best it can, charities in Western Europe and North America.”⁸⁹

⁸⁶ Gunaratna, 223-224.

⁸⁷ Gunaratna, 223-224.

⁸⁸ Gunaratna, 225.

⁸⁹ Gunaratna, 227.

Bin Laden and al-Zawahiri's message to al Qaeda members is "you are carrying out God's wish" which inspires these members to "relentlessly pursue jihad." Al Qaeda prepares its members "psychologically and physically to struggle against all odds, suffer heavy losses yet continue fighting to the death." Al Qaeda calls on its members, supporters, and all Muslims around the world, as God's warriors, to fight the Satanic US forces. Al Qaeda stresses that "a Muslim's duty is jihad, [and] all Muslims are expected to participate, if not support, the mujahidin fighting the US."⁹⁰

Organization

Al Qaeda reorganized in 1998 "into four distinct but interlinked entities. The first was a pyramidal structure to facilitate strategic and tactical direction; the second was a global terrorist network; the third was a base force for guerrilla warfare inside Afghanistan; and the fourth was a loose coalition of transnational terrorist and guerrilla groups."⁹¹ Al Qaeda provides its strategic and tactical direction through its "Consultation Council (Majlis al-Shura) consisting of five committees (Military, Business, Communications, Islamic Studies and Media), each headed by a senior leader in the organization, who oversees the operations of the organization."⁹²

According to Jerrold M. Post, al Qaeda's global terrorist network is made up of:

Permanent or independently operating semi-permanent cells of al Qaeda trained militants established in over seventy-six countries worldwide as well as allied Islamist military and political groups globally. The strict adherence to a cell structure has allowed al Qaeda to maintain an impressively high degree of secrecy and security. These cells are independent of other local groups al Qaeda may be aligned with, and range in size from two to fifteen members. Al Qaeda cells are often used as support for terrorist acts. Moreover, as was the case with the al Qaeda bombings in Kenya and Tanzania, locals who have been trained by, but are not official members of al Qaeda, may be activated to support an operation. Although the September 11 hijackers were members of sleeper cells in the United States, most cells are used to establish safe houses, procure local resources and support outside operatives as needed to carry out an attack.⁹³

⁹⁰ Gunaratna, 230.

⁹¹ Gunaratna, 57.

⁹² Post, 31-32.

⁹³ Post, 33.

Al Qaeda's ideology, leadership, and inspiration continue to unite diverse groups of radical Islamists. Beyond the al Qaeda cells "maintained in over 60 countries worldwide, al Qaeda sympathizers exist in virtually every country on earth. The sympathizers are not only the disenfranchised youth of impoverished communities, but include wealthy and successful businessmen in countries such as Saudi Arabia and Egypt."⁹⁴ Al Qaeda's use of a pyramidal organization with a loose coalition of groups, sleeper cells, and worldwide sympathizers all connected by human and electronic networks provide a means to operate and grow while remaining dispersed and hidden.

Al Qaeda recruitment depends on "familial ties and relationships, spotters in mosques who identify potential recruits and the volunteering of many members. Al Qaeda members recruit from their own family and national/social groups, and once trained these members are often reintegrated into their own communities."⁹⁵ Al Qaeda "promotions and appointments" are based on these "ties of family, friendship and nationality."⁹⁶ Thus al Qaeda's structure is strengthened by a strong sense of family, social, and community ties—al Qaeda is family.

Support

Al Qaeda's "future survival will depend on the continuing appeal of its radical ideology that sustains a fledgling global support network." Many Muslims, both literate and illiterate, see al Qaeda's ideology "as compatible with Islamic theology." As there is little counter-propaganda to al Qaeda's ideology, recruits and financial support likely will continue to flow from "the Muslim territorial and migrant communities from Australia to the Middle East and Canada."⁹⁷

As the Global War on Terror has increased the threat to Islamic terrorist groups, al Qaeda has begun to enlist "the support of underground groups as well as legitimate political parties." Shifting the burden of "propaganda, recruitment and fundraising" to Islamic political parties, al Qaeda intends to enable "Islamist terrorist groups to concentrate on planning, preparing and conducting attacks." Al Qaeda is calling upon the political parties "to 'expose' the 'rulers' who fight Islam; highlight the 'importance of

⁹⁴ Post, 34.

⁹⁵ Post, 34.

⁹⁶ Gunaratna, 57.

⁹⁷ Gunaratna, 223.

loyalty to the faithful and relinquishing of the infidels in the Muslim creed’; hold ‘every Muslim responsible for defending Islam, its sanctities, nation, and homeland.’”⁹⁸

Summary

By identifying the purpose and objectives, professed strategy, organization, and support of Vietnamese communists, Hamas, Iraqi insurgents, and al Qaeda, airmen can develop a better understanding of these organizations and their operations. This study also exposes patterns in their operations and efforts to counter airpower.

1. Their purposes or objectives tend to reflect an indefinite or long-term view, e.g. continue to resist until objectives are met, use time as a weapon, and outlast the enemy.
2. Their strategies involve armed and political action.
3. They use both armed and political efforts to limit airpower. Armed forces disperse to deny airpower lucrative targets (to detect or strike). Political support garnered through diplomacy or by influencing international opinion may limit the acceptable use of airpower.
4. They use small groups or cells that operate autonomously via network communication, e.g. mostly lateral in structure versus vertical or hierarchical as in the US military. This dispersed force method of operation provides a means to adapt, change, or respond more quickly than larger conventional militaries.
5. They exploit social and political structures and organizations, the population via support or coercion, and technology to enable robust communication and intelligence collection. In many cases they have an information advantage over their adversaries.
6. Their success and survival depends mainly on their organizational structure.
7. If threatened by an opposing force, they need a safe haven and an environment suitable for dispersing or hiding.
8. They typically rely on both internal and external support.

The following table provides a big picture comparison and view of the patterns and characteristics of the organizations discussed in this chapter.

⁹⁸ Gunaratna, 226.

Table 1

Characteristics of Dispersed Force Organizations

Groups	Purpose/Objectives	Strategy	Organization	Support
Vietnamese Communists	National independence, conduct protracted revolutionary war via guerrilla tactics and insurgency	Armed and political <i>dau tranh</i> struggle, adapted Mao's guerrilla warfare	Tied to strategy. Village admin, gov't, and safe haven. Small units that later formed into regiments	Internal (south Vietnamese population) and external (North Vietnam, China and Russia)
Hamas	Establish an Islamic Palestinian state, <i>jihad</i> against Israel	Armed and political action to liberate Palestine and defeat the Zionist occupation	Political-military command, intermediate level (cell network), and ground troops (suicide bombers and shooters)	Internal (Muslims and Palestinians in Gaza Strip and the West Bank) and External (Iran, Jordan, and Muslims worldwide)
Iraqi Insurgents	Rid Iraq of all US and Coalition forces. Baathists restore power. Islamic extremists establish an Islamic Theocracy.	No professed strategy. Actions indicate effort to destabilize Iraq and delegitimize new government	Small cells. Some Sunni groups uniting, but not likely Sunni and Shi'a groups in Iraq will unite	Internal (portions of the population) and external (Iran and Syria)
Al Qaeda	Remove Western presence from all the lands of Islam. Reestablish Caliphate	Mobilize and unite Muslims worldwide into <i>jihad</i> against West. Drive US to bankruptcy	Global Terrorist Network, coalition of transnational terrorist and guerrilla groups	Muslims worldwide, Islamic political parties

Chapter 3

Links Between Air And Space Power And Dispersed Forces Operations

Air power alone does not guarantee America's security, but I believe it best exploits the nation's greatest assets—our technical skill.

—General Hoyt S. Vandenberg

Nothing is more annoying than to be attacked by a weapon which you have no means of hitting back at.

—Hugh Montague Trenchard

Our priority will be first to disrupt and destroy terrorist organizations of global reach and attack their leadership; command, control, and communications; material support; and finances. This will have a disabling effect upon the terrorists' ability to plan and operate.

—President George W. Bush
National Security Strategy, 2002

This chapter discusses the congruent links between air and space power and dispersed force operations. Put simply, this discussion identifies how air and space power has and, as of this writing, can combat dispersed and hidden enemy forces. Air and space power currently has congruent links (e.g. may impact or are relevant) to dispersed forces via special operations; air attack (e.g. air interdiction, close air support, and strategic attack); airlift; intelligence, surveillance, and reconnaissance (ISR); and information operations (IO).

Special Operations

Special air operations have often played a significant role in countering adaptive dispersed forces by providing air mobility, firepower, and support to civil-military operations (CMO) and psychological operations (PSYOPS). In a striking parallel to the current challenge of insurgent movement across Iraqi borders, the Rhodesian military in the 1970s “used mounted troops, backed up by helicopters, to patrol the long borders.” The Rhodesians, unable to afford large-scale civil action programs to counter insurgents, effectively “set up small and highly mobile forces throughout the country” to catch guerrillas as they crossed the border. The object was “to destroy guerrilla bands before they could reach the heavily populated sections of the county and initiate widespread

harassment attacks in the larger towns and urban areas.” Using these mobile forces, the Rhodesian military “maintained the tactical/operational edge over their enemy” and “inflicted horrendous casualties upon guerrillas while taking minimal losses themselves.” Although these operations helped the Rhodesian government maintain “effective control throughout the country,” the insurgents exhausted the government through protracted conflict and negotiated a “settlement that granted free elections” with insurgent participation and disarmament.⁹⁹ Similar to the Rhodesian effort, identification of guerrilla bands crossing the border into Iraq today is problematic. Attack helicopters combined with mobile Special Forces troops can provide a way to get to questionable groups quickly and verify their intentions.

As proven essential by the British counterinsurgency in Malaya and by the US Marines in their small wars experience, air mobility also “provides a means of rapidly transporting security forces and supplies to forward areas.” By moving and resupplying troops, air mobility can infiltrate enemy areas of operation with “reconnaissance teams, surveillance personnel, and special intelligence resources.” If enabled by timely intelligence, air mobility can exploit its flexibility and speed to conduct combat assault operations against fleeting dispersed force targets. If special operations troops or noncombatants are injured, air mobility can evacuate them. Air mobility can also evacuate special operations teams that are at a disadvantage, e.g. outgunned by larger enemy forces.¹⁰⁰

Air mobility’s ability to insert Special Forces into enemy areas enables SOF-aided or guided air attack. Special Forces may identify and target enemy forces for airpower to strike (e.g. OEF). Thus, Special Forces may support the air component’s targeting of enemy forces or leaders while simultaneously receiving CAS or firepower as needed.

Special air operations gunships and attack helicopters as well as fighter, bomber, and attack aircraft can provide dominant firepower. Airpower was “key to providing... firepower to back up the small elite light infantry and police units” fighting South African insurgents in the 1960s to 1980s. Using platoon operations backed by air firepower in

⁹⁹ James S. Corum and Wray R. Johnson, *Airpower in Small Wars: Fighting Insurgents and Terrorists* (Lawrence, K.S.: University Press of Kansas, 2003), 297-298, 301, 319.

¹⁰⁰ Air Force Doctrine Document (AFDD) 2-3.1, *Foreign Internal Defense (FID)*, 10 May 2004, 17-18.

low-intensity conflict, the “highly mobile elite troops” became the “best means to fight insurgents” in South Africa.¹⁰¹

Air mobility and other special air operations can support civil-military operations (CMO). Air mobility can help strengthen relationships between civilian populations, government authorities, and military forces by establishing lines of communication and meeting public or governmental needs in isolated areas. If terrain or hostile forces isolate portions of the population, air mobility can provide a way to bypass these challenges to get government representatives or special operations teams to the people. Special air operations can support civil affairs operations through tanker airlift control element (TALCE) resources, communications, “information broadcasting, and technical advice on air and space operations.” These air support efforts can help affect favorable responses from friendly, neutral, or hostile civilians.¹⁰²

Special operations may also conduct PSYOPS, which have played an effective role in past insurgencies. For example, in Malaya:

Aircraft were extensively used for psychological warfare, including leaflet and loudspeaker operations. By the end of the conflict there were few insurgents who had not been showered by leaflets or heard a message to surrender broadcast from aircraft. Indeed, psychological warfare was key to the campaign and sought to convince local people of the value of government services and of the promised independence. It was equally important in destroying insurgent morale.¹⁰³

The Information Operations section of this chapter provides a more in-depth discussion of PSYOPS.

Air Attack

Air and space power may conduct air interdiction (AI), close air support (CAS), and strategic attack against known locations of dispersed enemy forces and their leaders. AI involves air maneuver and attack that indirectly support land forces, e.g. strikes that destroy massing insurgents or their resources before they engage government or military forces. CAS entails air maneuver and attack that directly support land forces, e.g. strikes

¹⁰¹ Corum and Johnson, 315.

¹⁰² AFDD 2-3.1, 28.

¹⁰³ Jay Gordon Simpson, “Not by Bombs Alone: Lessons from Malaya,” *Joint Force Quarterly*, Summer 1999, 98.

in support of US troops engaged with insurgents in Fallujah.¹⁰⁴ AI and CAS provide a means to dominate the land environment against identified enemies not shielded by the population or collateral damage concerns. Strategic attack offers an ability to strike the known location of a group leader provided collateral damage is acceptable or not an issue.

As discussed in chapter 1, a classic insurgency eventually involves massing forces to strike isolated government forces or to conduct an offensive, e.g. Mao's third stage. AI and CAS can counter these insurgent actions. As demonstrated against the Communist insurgents in the Greek Civil War, 1943-1949, and in Vietnam during the 1968 Tet Offensive, airpower was most decisive when dispersed enemy forces massed to fight conventionally. The Greek National Army (GDA) used AI and CAS to crush the insurgent Greek Democratic Army when they strategically blundered by massing and giving up the advantages of being dispersed. The counterinsurgent Royal Hellenic Air Force attacked "communist-fixed positions, interdicted GDA lines of communication, and provided effective close air support of government forces as they launched a series of offensives that ultimately destroyed" the insurgent Greek Democratic Army.¹⁰⁵ Similarly, US and South Vietnamese airpower helped destroy a majority of the Viet Cong insurgents when they massed for the Tet Offensive. When an estimated 70,000 enemy troops "struck thirty-six of the South's forty-four provincial capitals," US and South Vietnamese conventional military might turned the offensive into a military disaster by killing "almost 40,000 Viet Cong, the core of the insurgent leadership."¹⁰⁶ Forward Air Controllers were launched "all over Vietnam to cover the battle areas" and direct CAS. Killing insurgents "within a few feet" of base security forces, "Army helicopter gunships in conjunction with the AC-47s provided the fire support" for CAS.¹⁰⁷ Thus, when forces no longer disperse but mass to fight as conventional forces, airpower can provide potent firepower. As a result airpower may deter insurgents and other dispersed forces from massing at all.

¹⁰⁴ Air Force Doctrine Document (AFDD) 1, *Air Force Basic Doctrine*, 17 November 2003, 44.

¹⁰⁵ Corum and Johnson, 135.

¹⁰⁶ Mark Clodfelter, *The Limits of Airpower: The American Bombing of North Vietnam* (New York, N.Y.: The Free Press, 1989), 112, 138.

¹⁰⁷ General William W. Momyer, *Airpower in Three Wars: WWII, Korea, Vietnam* (Maxwell AFB, A.L.: Air University Press, 2003), 351.

The US Marine Corps, the US military service most experienced in fighting dispersed forces (e.g. to include air operations in South and Central America from 1916 to the 1930s), provides insight about the need for air attack against dispersed forces. Corum and Johnson explain, “The Marine aviators’ commitment to close support of their earthbound comrades” is “found in Marine Corps aviation’s first experiences in small wars.”¹⁰⁸ The Marine Corps lessons learned from these experiences are captured in its 1940 *Small Wars Manual*. The following portions of the manual explain:

The infantry airplanes may be used for the emergency transport of men and supplies, or they may be called upon to assist some ground patrol in a difficult situation by attacking the hostile ground force. In short, the airplanes assigned to the infantry mission... support the ground forces in whatever manner is expedient, regardless of their normal function in major warfare.¹⁰⁹

Attacks on towns.—When hostile forces seek the shelter of occupied towns and villages... it may be feasible to drop warning messages to the inhabitants, and allow them sufficient time to evacuate before initiating an attack.... One bomb, penetrating the roof of a small house before exploding will effectively neutralize all occupants; those not being killed or wounded will immediately escape to the streets to become targets for machine guns. Continuous bombing forces the defenders from their shelters and facilitates their capture or defeat by the ground forces.

Aviation as a mobile reserve.—The employment of aviation as a reserve for infantry in battle is merely an application of the principle of quick concentration of superior force at the decisive point. The mobility and striking power of combat aviation favors such employment in minor operations.¹¹⁰

Although lucrative strategic targets are not typically associated with insurgent or terrorist groups, strategic attack also offers a congruent link to dispersed forces through targeting their leadership. Air strikes may directly “threaten the security of adversary leadership” and “offer a means of striking otherwise unreachable individuals.” A sniper

¹⁰⁸ Corum and Johnson, 44.

¹⁰⁹ United States Marine Corps, *Small Wars Manual* (Washington, D.C: United States Government Printing Office, 1940), 15, 17.

¹¹⁰ *Small Wars Manual*, 20.

or assassin may not be able to get through the “elaborate security networks” or “close ring of bodyguards” protecting some leaders, “but an air strike can bypass them.”¹¹¹

In many cases air and space power provide the fastest response and lowest risk to US lives in striking dispersed force leaders. Strategic attack offers an excellent option when attacking dispersed force leadership at a known location and collateral damage may be eliminated or reduced to an acceptable level (e.g. the use of a Hellfire missile or small diameter bomb providing a lower level of damage). But strategic attack’s ability to strike a dispersed force leader, or even to threaten to do so, “requires both superb intelligence to locate the leader in question” and the rapid ability “to strike that location with great precision.”¹¹² On-call air assets using integrated all-source intelligence, time-sensitive targeting, network-centric operations, lateral communication (versus hierarchical), and decentralized execution may rapidly strike detected dispersed forces and their leaders. Without integrated intelligence, operations, communication, and the authority to execute, airmen employing on-call assets are ill equipped to exploit their fast, flexible response against fleeting leadership targets.

Empowered by timely all-source intelligence and on-call assets, airmen may strike the known locations of dispersed force leaders in an effort to eliminate them, affect their capitulation or will to fight, disrupt their ability to lead, or change their behavior.¹¹³ Direct strikes against al Qaeda leaders “carried out by SOF, US aircraft, and other US government agencies were examples of strategic attack” during Operation ENDURING FREEDOM (OEF).¹¹⁴ For example, in support of OEF and the Global War on Terror, a UAV employed a Hellfire missile to kill Yemen’s al Qaeda commander on 3 November 2002.

The Israeli Defense Forces have employed F-16s and Apache helicopters to strike and kill leaders in terrorist groups. Israel’s use of attack helicopters against terrorists in Palestinian-controlled areas “proved to be precise and effective.” Throughout 2000 and 2001 Israeli Apache helicopters fired laser-guided rockets killing a Tanzim leader, Hizbullah cell leader, and a Palestinian Islamic Jihad (PIJ) activist “on his way to carry

¹¹¹ Daniel Byman and Matthew Waxman, *The Dynamics of Coercion: American Foreign Policy and the Limits of Military Might* (Cambridge and New York: Cambridge University Press, 2002), 94.

¹¹² Byman and Waxman, 95.

¹¹³ Air Force Doctrine Document (AFDD) 2-1.2, *Strategic Attack*, 30 September 2003, 1-2.

¹¹⁴ AFDD 2-1.2, 6.

out two major attacks.” On 22 July 2002, “in what was referred to by [Israeli Prime Minister] Sharon as ‘one of our greatest successes,’” an Israeli F-16 fighter jet dropped a one-ton bomb to “kill Salah Shihada, the leader and founder of Hamas’ military wing of ‘Izz ad-Din al-Qassam in Gaza.” Although Shihada was responsible for “fifty-two attacks on Israeli targets, killing a total of 220 Israeli non-combatants and sixteen soldiers,” the F-16 bombing drew international criticism as it also “killed fifteen civilians, including nine children.” Explaining the importance of targeting terrorist group leaders, a former Israeli Lt Colonel said:

Assassinations of military leaders are traumatic events in the lives of their organizations, often leading to a change in organizational behavior. Commanders become extremely suspicious and cautious. They leave few traces of their whereabouts; restrict information about operational planning to small groups of secret keepers; and recruit new members more selectively. The paranoid environment in which terrorists operate reduces their effectiveness drastically. Trust is the bedrock of any human activity, including terrorism. Without it, the organization becomes disjointed; information cannot be disseminated; people do not feel part of a team; lessons are not learned properly.¹¹⁵

On 20 August 1998, the United States employed Tomahawk cruise missiles to strike bin Laden and al Qaeda sites in response to al Qaeda bombing the US Embassy buildings in Nairobi and Dar es Salaam. The Clinton Administration executed the attack on 20 August “because of intelligence reports that bin Laden and the senior leadership of al Qaeda would be meeting that day” at one of the targeted camps. The cruise missiles “missed bin Laden and the other senior al Qaeda leaders by a couple of hours.”¹¹⁶

This failure to hit bin Laden reveals that timely, accurate intelligence and precision are vital enablers. Given current precision capabilities, “the limiting technical factor on decapitation strikes for the United States comes from intelligence, not the accuracy of delivery.”¹¹⁷ To successfully attack enemy leadership, US decision cycles (the cycle of finding, targeting, receiving approval to attack, and then executing that attack) must exploit and act on relevant intelligence before the adversary can react. This

¹¹⁵ Gal Luft, “The Logic of Israel’s Targeted Killing,” *Mid East Quarterly* X, no. 1 (Winter 2003): 2-3, 7.

¹¹⁶ Daniel Benjamin and Steven Simon, *The Age of Sacred Terror: Radical Islam’s War Against America* (New York: Random House Trade Paperbacks, 2003), 260-261.

¹¹⁷ Byman and Waxman, 95.

challenge illustrates the essence of why leaders disperse or hide to survive and counter airpower and identifies a limitation of strategic attack regardless of the strike asset used.

Operation El Dorado Canyon in 1986 also illustrates how difficult and intelligence dependent strategic attack is against a leader in hiding.¹¹⁸ As a national leader, Mohammad Qaddafi's ability to hide was more problematic than for most insurgent or terrorist group leaders, yet he was successful in thwarting US intelligence and targeting. Collateral damage and civilian casualty concerns also "prevented four of the nine F-111s sent against" Qaddafi's command center "from dropping their ordnance."¹¹⁹

Airlift

Airlift can provide essential support to land forces combating dispersed forces. For the British, French, and their colonial African governments, airlift "was essential in keeping isolated outposts and forces supplied" during insurgencies in southern Africa from the 1960s to 1980s.¹²⁰ The US Marine Corps' experience in Central and South America from 1916 to the 1930s also revealed the importance of airlift. The 1940 US Marine Corps *Small Wars Manual* captures the following lessons from these experiences:

The transportation of troops and supplies becomes of increasing importance as the ground forces in a small wars campaign work inland, away from the navigable waters and railroads usually found in the coastal regions of tropical countries. Roads for wheeled transport are apt to be poor or non-existent, and dependence for supply of certain units may have to be placed on slow animal transport. As distances from the base of operations increase, this form of supply tends to break down, especially during rainy seasons, and the most advanced of the ground forces may be partially or altogether dependent upon air transport for months at a time. The air force, then, should include a much greater percentage of transport aircraft than is required for the normal needs of the air units themselves.

Factors which may influence the decision to use air transport are: unfavorable condition of roads and trails; long distances through hostile territory necessitating the provision of strong escorts for land transport;

¹¹⁸ "While the United States does not conduct political assassinations," and would be unwise to do so in light of reciprocity and American moral values, "It can capture enemy leaders or kill them if they are legitimate, legal military targets and the circumstances warrant." AFDD 2-1.2, 11.

¹¹⁹ Tim Zimmerman, "Coercive Diplomacy and Libya," *The Limits of Coercive Diplomacy*, Alexander George and William E. Simons, eds., (Boulder, C.O.: Westview Press, 1994), 213-215.

¹²⁰ Corum and Johnson, 315.

and emergency situations requiring immediate action.... The air force should generally have priority in the use of air transport for its own requirements.¹²¹

When the British fought the communist insurgents in Malaya from 1948-1960, their use of airlift “included medium and short range transport, supply drops, airborne operations, medical evacuation, command, and liaison. This force was the largest component of airpower used during the conflict.” Airdrops “allowed troops to penetrate the jungle without vulnerable lines of communication or excessive loads.” Helicopters rapidly reinforced besieged garrisons and moved troops deep into the jungle before communist terrorists could withdraw. Helicopters not only transported troops far into communist territory, but also delivered them “fresh and ready to fight.” The helicopter’s flexibility “was also important for removing casualties.”¹²²

The British experience against communist insurgents in Malaya revealed airpower was most useful “providing indirect support through movement of troops, aerial resupply, reconnaissance, and psychological operations.” Direct support through air strikes, “although important, was consistently relegated to a secondary role by the British Army and [Royal Air Force] RAF officers alike.”¹²³

As early as 1961 in Vietnam, US airlift resupplied Army Special Forces at remote locations, airdropped Vietnamese paratroopers, and dropped flares for friendly forces under attack at night. As the war progressed, airlift enabled search and destroy operations in remote areas. Transport aircraft modified to perform the role of gunships significantly increased ground forces’ firepower against insurgents. Airlift also provided almost all casualty evacuations with helicopters performing most battlefield evacuations and C-130s flying casualties to in-country hospitals “mostly located at C-130 airfields.” Airlift offered a way to avoid “enemy road ambushes.”¹²⁴

Similarly in the counterinsurgency in Iraq, Air Force Chief of Staff General John Jumper turned to airlift to move supplies and reduce the need for trucks, which are vulnerable to insurgent attacks. To reduce the “100 casualties per month from

¹²¹ *Small Wars Manual*, 21.

¹²² Simpson, 95-97.

¹²³ Corum and Johnson, 215, 315.

¹²⁴ Carl Berger, *The United States Air Force in Southeast Asia, 1961-1973: An Illustrated Account*, revised edition (Washington, D.C.: Office of Air Force History, USAF, 1984), 169-177, 184.

improvised explosive devices (IEDs),” General Jumper volunteered the Air Force’s “C-130 fleet to take a substantial part of the Army’s truck traffic off the roads of Iraq and move those supplies by air.”¹²⁵

Intelligence, Surveillance, And Reconnaissance (ISR)

Air and space power can support efforts against dispersed forces through ISR. In the Malayan and Rhodesian counterinsurgency efforts fixed-wing aircraft and helicopters provided low-tech ISR (i.e. eyesight). Slow flying aircraft and helicopters could monitor areas, look for indicators or changes in the environment, or spot enemy (or suspected enemy) movement or locations.

In Vietnam, ISR air efforts ranged from airborne forward air controllers (FACs) using their eyes to spot insurgent or troop activity to airborne signal collection via high-tech sensors. One high-tech sensor program, called MUSCLE SHOALS, used A-1E, OP-2E, and F-4 aircraft as well as CH-3 helicopters to airdrop acoustic and seismic sensors. EC-121 aircraft collected and retransmitted data from these sensors that detected “enemy foot or vehicular movement” on infiltration routes known as the Ho Chi Minh trail. These sensors detected the sound or vibration, “vertical earth-shock,” from vehicular movement. Micro-gravel, small explosive devices airdropped with the sensors, exploded when personnel stepped on them generating sound detectable by the acoustic sensors. An Infiltration Surveillance Center received and analyzed the real-time signals collected by the EC-121s and then passed movement trends to an Airborne Battlefield Command and Control Center (ABCCC) and FACs (for target identification). Provided strike assets were available and no friendly forces were nearby, the ABCCC and FACs directed attack aircraft to strike the areas of movement. The MUSCLE SHOALS program struggled with technical challenges, accurate plotting of sensor locations, diplomatic approval of drop sights, sensor activations caused by weather and animals, new tactics, and low priority for FACs and strike aircraft. Although this program had limited effectiveness, the potential use of air and space power for ISR is clear.¹²⁶

¹²⁵ David A. Fulghum, “USAF Volunteers C-130s To Take Trucks Off Iraqi Roads,” *Aviation Week & Space Technology*, 20 December 2004, 32.

¹²⁶ Colonel Jesse C. Gatlin, *Igloo White (Initial Phase)* (HQ PACAF, Directorate, Tactical Evaluation: Project CHECO Southeast Asia Report, 31 July 1968), 1-4, 8-18, 30, available at the Air University Library, Maxwell AFB, AL.

The ISR value of a pilot or UAV operator's eyes in detecting dispersed forces through changes in the environment should not be overlooked. In Operation ALLIED FORCE, although more of a conventional conflict than unconventional, A-10 FACs located "about 80 percent of their targets" by using their eyes to find dispersed military vehicles. Scouting areas of suspected enemy activity, A-10 FACs looked for "new revetments, tracks leading into the woods, and unusually configured shapes" and then used binoculars to identify targets.¹²⁷ Although identification by air of personnel, e.g. insurgents dressed as civilians, would be difficult if not impossible, the use of airborne eyes could enable the rapid deployment of land forces to investigate potential dispersed force activity or identify suspect groups.

The Israeli Defense Forces (IDF) uses cameras placed on UAVs to beam color video "in real-time at 30 frames a second" (e.g. same rate as TV) directly to 3 to 5 inch LCD screens worn by troops or placed in attack helicopters, tanks, armored vehicles, and a ground command center. The ground command center controls the UAVs, but the IDF forces "have the ability to guide the camera to meet their specific needs." Israeli security officials claim an "improved ability to carry out airstrikes to the point that targeted militants no longer have time to flee." Itzhak Beni, the chief executive of Tadiran Electronic Systems that developed this technology, has declared that this capability reduces combat and civilian casualties as troops may see "everything that is behind the hill and around the corner."¹²⁸

USAF airborne and space ISR capabilities, such as radar tracking, communications, signals, electronic, and imagery collection, offer some means to detect and identify enemy dispersed groups. Airborne and space ISR assets could look for increases or changes in communications, signals, and the environment to detect enemy activity. Sensors on near space assets could supply persistent, broad collection while assets such as UAVs, Rivet Joint, or JSTARS could provide more localized looks at potential enemy activity. ISR efforts guided by timely HUMINT or informants would facilitate greater efficiency of limited ISR assets. To positively identify enemy dispersed

¹²⁷ Col Christopher E. Haave and Lt Col Phil M. Haun, *A-10s over Kosovo: The Victory of Airpower over a Fielded Army as Told by the Airmen Who Fought in Operation Allied Force* (Maxwell AFB, A.L.: Air University Press, 2003), 142.

¹²⁸ Associated Press, "Israeli Forces Using High-tech Video Tools," *The Baltimore Sun*, 6 March 2005, sec. A.

forces, airmen in most cases would need a synthesis of USAF ISR with other intelligence efforts and land force eyes on target. Once again, intelligence becomes a key enabler for effective air and space surveillance and reconnaissance against dispersed forces.

Information Operations

British Information Operations (IO), or PSYOPS, in Malaya used aircraft extensively to drop leaflets and to communicate messages via loudspeakers to insurgent troops. The British effort consisted mostly of dropping leaflets from aircraft. In 1955, aircraft dropped 141 million leaflets “including safe conduct passes, parodies of the enemy leadership, reports of the deaths of key communists, and even enticements to pregnant female terrorists to surrender so their babies could be born in a government hospital.” As enemy leaders would punish those who read the leaflets, aircraft with loudspeakers provided another means to communicate with the insurgents. Referred to as skyshouting, the British targeted “individuals and groups by name and language” with “broadcast continuous loop messages.” Insurgent interrogations revealed that many insurgents “considered loudspeaker aircraft highly effective in inducing surrenders.”¹²⁹

American PSYOPS in Vietnam also used aircraft to airdrop propaganda leaflets, radios, and broadcast messages over loudspeakers. Aircraft dropped “billions of leaflets” over the “South Vietnamese countryside and along the Ho Chi Minh trail in Laos and Cambodia.”¹³⁰ Aircraft delivered “thousands of miniature transistor radios” by parachute into North Vietnam to increase the listening audiences of the “Voice of Freedom” and “Voice of America” radio programs.¹³¹ Aircraft broadcast “tens of thousands of hours” of loudspeaker messages “directed at suspected or known enemy locations.” Leaflets and broadcasts encouraged desertion and surrender by capitalizing on the enemy’s fear of being killed, personal hardships, family safety and well-being, and claiming that Hanoi’s communist effort was doomed to fail.¹³²

Airpower’s speed and flexibility enabled an effective leaflet and broadcast effort called “Quick Reaction” messages. After receiving a PSYOP request from combat units,

¹²⁹ Simpson, 98.

¹³⁰ Stephen T. Hosmer, *Psychological Effects of U.S. Air Operations in Four Wars 1941-1991: Lessons for U.S. Commanders* (Santa Monica, C.A.: RAND, 1996), 121, and Berger, 15, 67.

¹³¹ Robert W. Chandler, *War of Ideas: The U.S. Propaganda Campaign in Vietnam* (Boulder, C.O.: Westview Press, 1981), 135.

¹³² Hosmer, 121-124.

propaganda battalions prepared and Air Force aircraft disseminated the messages typically within 24 hours. One of the “most credible and effective ‘Quick Reaction’ techniques” involved tailored messages from Viet Cong and North Vietnamese Army ralliers, or defectors, urging their former units and comrades to rally (defect) to the South. In one instance, a rallier’s taped broadcast led to 88 of his former comrades defecting to the South within 24 hours.¹³³

USAF IO and PSYOPS include not only the ability to airdrop leaflets, but also EC-130 Commando Solo airborne capabilities to broadcast messages via television and radio. The EC-130 can transmit live or taped PSYOPS and civil affairs broadcasts over “AM/FM radio, short-wave, television, and military command, control, and communications channels” while jamming other broadcasts. According to CBS news, the EC-130 also dropped hand-cranked radios in Afghanistan during OEF.¹³⁴

USAF IO network warfare operations may also offer a link to dispersed forces that heavily depend on computer or electronic capabilities or are prone to attack and exploit computer networks. Although there has yet to be a cry of outrage over any ghastly terrorist or insurgent cyber attack, electronic guerrilla warfare is still evolving and could potentially present a threat to American and international commerce, infrastructure (e.g. computer controlled water works, power plants, and railway systems), and computer networks. IO network warfare operations would attack these enemy capabilities and their networks while protecting our own. Ideally, network warfare ops eventually will provide an electronic means to identify, track, and target dispersed forces.

Conclusion

Thus, air and space power via special operations, air attack, airlift, ISR, and information operations provide congruent links to dispersed forces and their operations. As seen in most of these functions, timely and accurate intelligence with rapid response are the principal enablers. Recent advances in technology also enhance air and space

¹³³ Chandler, 86-88. Chandler provides many of these kinds of examples, specific leaflet and broadcast messages, and quotes from defectors on the impact of these psychological operations.

¹³⁴ “EC-130E Commando Solo / Rivet Rider,” *Federation of American Scientists website*, n.p., on-line, Internet, 16 March 2005, available from <http://www.fas.org/man/dod-101/sys/ac/ec-130e.htm>; and CBSNews.com Who’s Who Person, “Commando Solo,” 29 January 2003, n.p., on-line, Internet, 16 March 2005, available from http://www.cbsnews.com/elements/2003/01/29/iraq/whoswho538410_0_2_person.shtml.

power relevance through precision strike and reduced collateral damage potential. GPS-aided and laser-guided munitions now offer all-weather precision capabilities. The recently developed small-diameter bomb (SDB) enables lethality with a smaller blast and fragmentary footprint reducing the level of destruction and potential for collateral damage. By boosting intelligence capabilities and properly using current technological advantages, the Air Force can help strengthen US abilities to fight dispersed forces. In contrast to airpower limitations in Vietnam, today's rapid precision strike with low collateral damage munitions enabled by relevant intelligence equips airmen with powerful capabilities to counter insurgents and other dispersed forces.

Although the discussion in this chapter offered possibilities for airpower in combating dispersed forces, actual strategies to counter groups such as Hamas, Iraqi insurgents, and al Qaeda through the use of airpower are provided in the next chapter.

Chapter 4

Overcoming Incongruence

The difficulty in generalizing about insurrections arises from the fact that strategies that may be highly successful in one situation may be completely irrelevant in another. As guerrillas must live by their wits, so governments fighting guerrillas must be quick-witted and unencumbered by doctrine.

—Lucian Pye

In a world where unconventional warfare has become the state of the art, firepower no longer ensures victory. By alienating the local population, it provides a growing base of support to the guerrilla, terrorist, or 4th generation warrior.

—John Poole
Tactics of the Crescent Moon

The ballot box is the coffin of insurgency.

—Anonymous

This chapter demonstrates how airmen may best combat dispersed forces' strategy, organization, and support networks through a framework connecting air and space means to national ends.

Incongruence

A potential pitfall in strategy development against dispersed forces is to address issues from a military standpoint. The US system of government, American mindset, and the Department of Defense all encourage US military officers to focus on defense and winning the nation's wars while not interfering with the political realm or its civilian leadership. For example, General Westmoreland declared, "When does a professional military man put his fingers into the political mud and try to influence the political mechanisms by his actions... I am personally disposed to say he doesn't." Westmoreland also expressed this mindset while leading US military forces in Vietnam when he explained to reporters that the answer to insurgency was "firepower."¹³⁵ In contrast, guerrillas, insurgents, and terrorists typically interweave armed and political actions to

¹³⁵ John Nagl, *Counterinsurgency Lessons from Malaya and Vietnam: Learning to Eat Soup with a Knife* (Westport, C.T.: Praeger, 2002), 200-201.

influence or coerce civilians. As dispersed forces use political, psychological, social, and other nonmilitary tools to meet their objectives, it is crucial that US strategists also take a broad approach. All national instruments of power (diplomatic, informational, military, and economic) should be integrated to affect desired outcomes in political, psychological, and armed conflict realms. “Military prowess may be an essential part of national security,” Stephen Walt explained, “but it is by no means the entire story.”¹³⁶ To successfully combat dispersed forces, strategy should account for and support the entire story with a unified civil-political-military approach.

Air strategy against dispersed forces must exploit air and space power in support of an overall civil-political-military strategy. The British success against communist insurgents in Malaya identified the essential need for a “coordinated political-military effort.”¹³⁷ Referencing the need for a strategy to counter al Qaeda, Rohan Gunaratna, research fellow at the Centre for the Study of Terrorism and Political Violence, University of St. Andrews, Scotland, stated:

To counter [Al Qaeda’s] non-military capability and capacity, the anti-terrorist coalition needs both a strategic vision and tactical direction. There is no opposite number in the anti-terrorist coalition to counter Al Qaeda’s broad strategy as formulated by Dr Ayman Al-Zawahiri, Osama’s principal strategist. Moreover specialists in counter-revolutionary warfare and counter-terrorism lack a model to fight Al Qaeda — both its guerrilla arm, 055 Brigade, and its global terrorist network.¹³⁸

One model that helps fulfill what Gunaratna termed “a strategic vision and tactical direction” is found by returning to the basics, to Clausewitz and his trinity. Clausewitz used this trinity concept of the people, the government, and the armed forces to explain the importance of balance and relationships between these groups.¹³⁹ The Clausewitz trinity can also provide a foundation for counterinsurgency and counterterrorism strategies. Insurgents and counterinsurgents compete to make the people part of their

¹³⁶ Stephen Walt, “The Search for a Science of Strategy: A Review Essay on Makers of Modern Strategy,” *International Security* 12, no. 1, (Summer 1987): 164.

¹³⁷ Jay Gordon Simpson, “Not by Bombs Alone: Lessons from Malaya,” *Joint Force Quarterly*, Summer 1999, 91.

¹³⁸ Rohan Gunaratna, *Inside al Qaeda: Global Network of Terror* (New York: Columbia University Press, 2002), 223.

¹³⁹ Carl von Clausewitz, *On War*, trans. and eds. Michael Howard and Peter Paret (Princeton, N.J.: Princeton University Press, 1976), 89.

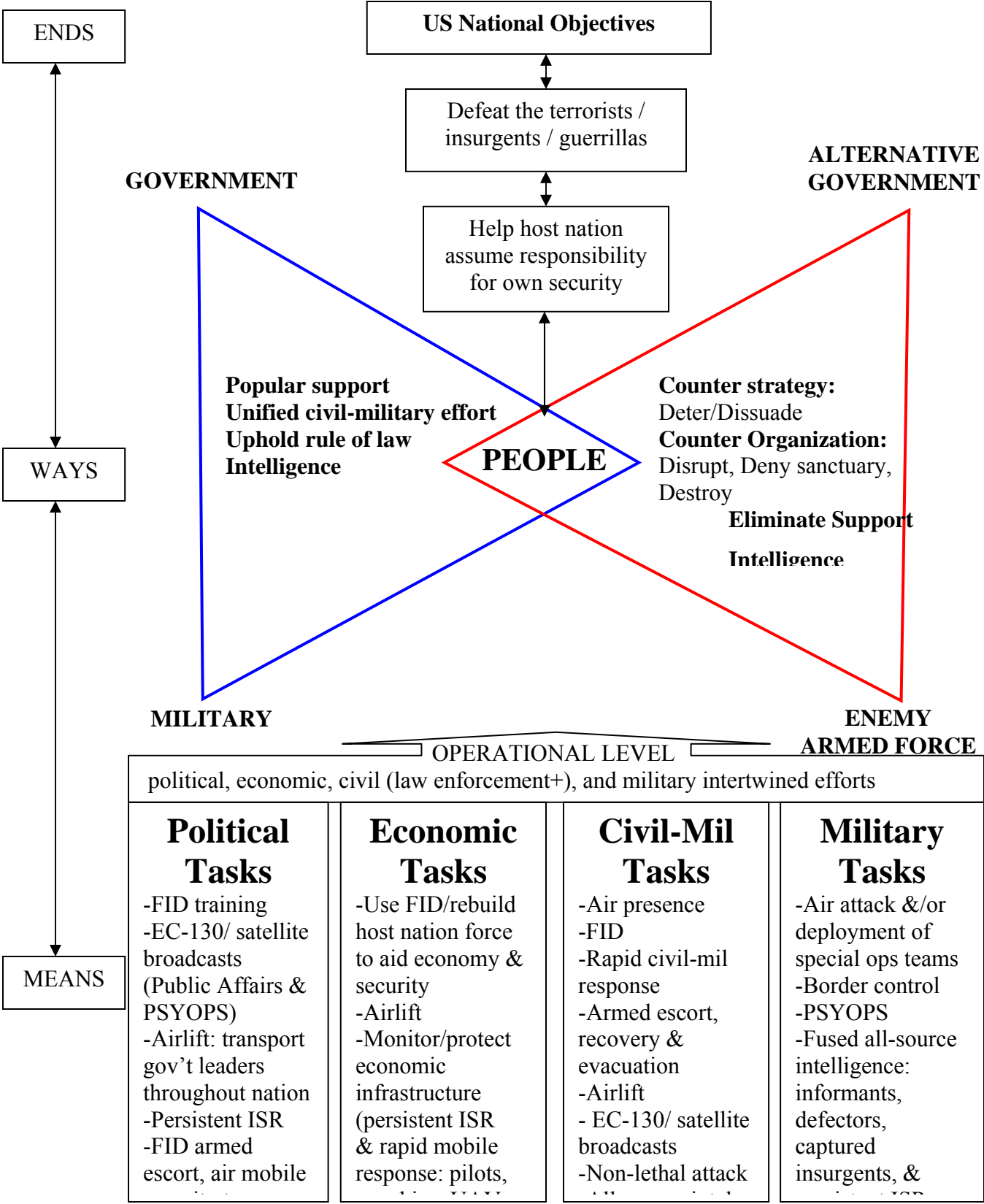
trinity, or triangle, through legitimacy (meeting people's needs) and armed forces (population security or coercion). For example, some Iraqi Baathist insurgents hold credibility as former governmental leaders and appeal to Iraqis who preferred the former regime. Other Iraqi insurgent groups, such as Zarqawi's Sunni extremists, promote an Islamic theocracy under Sharia law. Each insurgent group offers an alternative to the new Iraqi government with the purpose of winning the people to their cause. Similarly, al Qaeda intends to mobilize the world's Muslim population against the West in order to establish a global Islamic community. Counterterrorism efforts must compete with bin Laden to win Muslim hearts and minds. Thus, by using the basic concept of the Clausewitzian trinity, a model involving a host nation trinity versus an insurgent or terrorist trinity frames the competition for the population (see figure 1). By influencing or affecting the trinity groups, air strategy for combating dispersed forces can support government objectives. The Iraqi government can use Coalition and eventually Iraqi airpower as part of its strategy to boost legitimacy and popular support while isolating and defeating insurgents.

To develop strategy to task to meet national objectives, decision makers must properly assess the kind of war to be fought. Clausewitz emphasized that "the statesman and commander" must first establish "the kind of war on which they are embarking: neither mistaking it for, nor trying to turn it into, something that is alien to its nature."¹⁴⁰ In contrast to the conventional war focus of defeating an adversary's military, counterinsurgency and counterterrorism require winning the people as the center of gravity. As displayed in figure 1, air and space power (means) can strengthen each part of an attacked nation's trinity while weakening the insurgents' or attacker's trinity (ways) to reach US objectives (ends).

As airmen apply their trade in innovative and adaptive ways, they may intertwine their capabilities with political, economic, civil, and other military efforts to influence and impact these trinities. "Air power is not a compartmented thing peculiar to any one agency," Admiral Robert B. Carney expressed, "it is needed by the Army, Navy, Air Force, and Marine Corps for the accomplishment of their assigned roles and missions; it

¹⁴⁰ Clausewitz, 88.

Figure 1
Model for Combating Dispersed Force Organizations



is needed to expedite the business of other governmental agencies, or industry, and of the population at large.”¹⁴¹

US strategy must provide more than elimination of terrorists or insurgents to bring lasting peace or enduring stability. Killing the dispersed forces, although often necessary, addresses the symptoms of problems but not the problems themselves. An overarching strategy, e.g. one that answers how America intends to globally connect with Islamic societies that violently oppose assimilation into a Western “sacrilegious global economic empire,” should guide air and space power tasks.¹⁴²

Foreign Internal Defense (FID) provides an example of how affecting trinities can overcome incongruence. Airmen can train host nation forces to attack enemy dispersed forces directly once they have been located, but incongruence still remains in how airpower may impact the enemy’s strategy, organization, and support. USAF FID may overcome this incongruence through an indirect approach of strengthening the host nation’s trinity. FID tasks that support political, economic, and civil action can help strengthen each part of a host nation trinity and the relationships between them. USAF FID may boost a host nation population’s need for security while removing the grievance of American presence. FID also strengthens the legitimacy of host nation armed forces, their ability to show a national presence, and their response to insurgents or terrorists (e.g. airpower would limit insurgent ability to mass or execute an effective counteroffensive). FID training of a host nation’s air force provides indigenous capabilities to help meet population needs throughout a protracted insurgency and afterwards. Together these FID tasks can help a government win popular support to meet national objectives. Thus, although FID may combat dispersed forces directly, it also can indirectly deny the adversary the population support needed to fuel its strategy, organization, and support.

¹⁴¹ Robert Frank Futrell, *Volume I Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force 1907-1960* (Maxwell AFB, A.L.: Air University Press, 1989), 439.

¹⁴² Thomas P.M. Barnett, *The Pentagon’s New Map: War and Peace in the Twenty-first Century* (New York: G.P. Putnam’s Sons, 2004), 43.

Strengthening The Host Nation Trinity

Rather than just focusing on killing insurgents with firepower, an air strategy strengthening the host nation's trinity helps to win the most critical link of this triangle, the people. To strengthen the trinity, airmen can help provide what theorists identify as essentials for successful counterinsurgency. Counterinsurgency experts Frank Kitson, Julian Paget, Paul Wilkinson, Richard Clutterbuck, and Bard O' Neill stressed population support, civil-military efforts, the rule of law, and intelligence as key factors in combating insurgency.¹⁴³ To pursue these essentials, airmen should intertwine air capabilities into a unified counterinsurgency effort and thus facilitate synergistic effects.¹⁴⁴

Before air action is committed to strengthening a host nation trinity, agile-minded US leaders need to determine if the host-nation leadership has or can develop legitimacy, popular support, and ways to meet population needs. Fighting for a government unwilling to address public grievances most likely will lead to a failed counterinsurgency. Anthony James Joes explains:

It is essential that the government side establish and maintain the perception that it is going to win; it must give the appearance of strength, confidence, and unshakable permanency. If this is done, then many who support the insurgents will change sides or become neutral, and many neutrals will shift toward the government.¹⁴⁵

To win the population, airmen can strengthen the relationships between the people and government by helping to meet political, economic, and security needs. To address the population's political needs, airmen can help the government communicate its message to the people. Air and space assets can provide a powerful means to communicate government effectiveness and success, educate the population on ways they may voice grievances, and inform the population on how they may assist government forces to ensure their security. Satellite and aerial broadcasting over television and radio

¹⁴³ A synopsis of these theorists and their referenced writings is provided by James D. Kiras, "Terrorism and Irregular Warfare," *Strategy in the Contemporary World: An Introduction to Strategic Studies*, ed. John Baylis et al. (Oxford University Press, 2002), 221-222.

¹⁴⁴ For example, civil-military air can help meet public needs with judicious force (rule of law) boosting population support, which leads to more intelligence informants.

¹⁴⁵ Anthony James Joes, *Resisting Rebellion: The History and Politics of Counterinsurgency* (Lexington, K.Y.: The University Press of Kentucky, 2004), 235.

can augment and assist government transmitting facilities in getting messages to the population. Airdropped radios, leaflets, or loudspeaker broadcasts can cover areas without TV, radio, or under enemy control. Using these tools the government could rally the people to defend their nation by pointing out enemy locations and weapon caches, or offer amnesty to insurgents willing to turn themselves in.

Airlift and helicopters can help meet political needs by transporting government leaders throughout the host nation to show government support, representation, and effort to address population grievances. FID trained military forces can provide armed air escort and mobile security teams to support the government's ability to operate anywhere in the nation.

Air and space capabilities may help meet host nation economic needs. USAF FID efforts to rebuild the host nation air force can provide additional jobs (e.g. repairing infrastructure and training pilots) and increase government legitimacy, military credibility, and public morale. Airlift support of reconstruction efforts and air assets monitoring and protecting vital economic infrastructure can enhance economic stability.

Rapid mobile teams (small units in armed helicopters and on the ground) can also monitor and respond to identify or counter enemy threats to infrastructure. Intelligence (e.g. host nation informants and collection efforts) and ISR play vital roles in enabling response. On-call gunships, armed UAVs, or fighter aircraft with reconnaissance/targeting pods can provide firepower as needed.

Air support for unified civil-military efforts can increase population, law enforcement, and armed forces security. The presence of airpower can increase security by discouraging enemy activity (keep them dispersed and hidden), and thus embolden popular response against the enemy. To boost the population's perception of security and air protection, airmen must uphold the rule of law. When trying to win the population, heavy-handed attacks that kill civilians and damage their property will only bring fear of air presence and a perception of illegal or wrongful use of force. Counterinsurgency and counterterrorism operations must avoid harming the population, directly or indirectly, as this may drive the populace to the enemy cause. If the people witness restrained, judicious airpower use with precision targeting of bad guys without killing innocents or destroying neighborhoods, they are more likely to feel protected. Attacking targets with

small, low-yield precision bombs and non-lethal munitions enabled by robust intelligence can help achieve more favorable public response.

Bernard Fall explained, “In South Vietnam, where the enemy hardly offers conventional aerial targets...the use of massive bomb attacks and napalm drops on villages is not only militarily stupid, but it is inhuman and is likely to backfire very badly on the psychological level.” James Cross provided a similar, illuminating comment in 1963:

In a form of warfare in which political considerations regularly outweigh the military, air attacks against “suspected enemy groups” are all too likely to be self-defeating. The loss of support brought on by each innocent man or woman killed is likely to far outweigh the possible gain of hard-core rebels eliminated.¹⁴⁶

By exploiting multiple capabilities, e.g. helicopter gunships that also transport and evacuate personnel, air assets can bolster law enforcement and armed force security through flexible, rapid, and adaptive response. Air firepower, recovery, and evacuation can reduce security risks empowering small law enforcement or military units to fight larger or unexpected forces. Airlift, “an invaluable force multiplier,” can enable “relatively few soldiers to do the work of many.”¹⁴⁷ Airlift can augment security by rapidly moving personnel, supplies, and bypassing hostile areas or difficult terrain. Airlift indirectly enhances population security by reducing the disruption and angst caused by large armed force movements through communities. Air and space power can enable the power of presence and thus security without footprint—especially in a situation where US (Western) presence fuels a Muslim grievance.

The key factor in all counterinsurgency operations is intelligence. The intelligence effort must not only be timely but balanced with an understanding of the enemy’s political will, religious beliefs, cultural motivations, and public structure. For example, the US Ambassador to Vietnam, Maxwell Taylor, “recalled that American civilian and military chiefs knew little about the North’s leaders and virtually nothing

¹⁴⁶ James S. Corum and Wray R. Johnson, *Airpower in Small Wars: Fighting Insurgents and Terrorists* (Lawrence, K.S.: University Press of Kansas, 2003), 262, 477.

¹⁴⁷ Anthony James Joes, 239.

about their intentions.”¹⁴⁸ In order to influence and win the support of the people, airmen must understand them, which requires an extraordinary human intelligence (HUMINT) effort in collaboration with other intelligence, government, and nongovernmental agencies to derive the information needed to conduct counterinsurgency and counterterrorism operations.

Weakening The Adversary Trinity

To weaken the adversary trinity, air and space power can help counter adversaries’ strategy, organization, and support. The population again plays the key role because without the people an insurgent’s strategy, organization, and support will lose momentum, wither, and die. As the host nation government wins more of the population, the enemy is denied the popular support needed for information, recruitment, and resources. As the enemy’s need for public support increases, the government may manipulate this need to dissuade or deter the enemy from attacking civilians. Government efforts may gain the initiative by forcing an adversary to shift or change its strategy. The government may increase security by encouraging the enemy to reduce attacks on civilians. If the enemy continues its attacks against civilians, the government can debunk the adversary’s legitimacy and claims of noble cause.

Airpower presence, public protection, and attack without collateral damage can help counter insurgent strategy. An insurgent strategy of attrition assumes that if enough Americans are killed over time they will leave. Continued air presence helps to thwart this strategy and reminds insurgents of US or Coalition resolve. Thus, air presence should harass the enemy but not the general population.

Airpower’s role as a protector of the public can turn the insurgent’s own strategy against them. As insurgents attack civilians, airpower may indirectly help to dissuade these attacks. As it is not likely that all terrorist acts can be stopped, air assets should rapidly respond to explosions or attacks with civil-military teams able to secure the area, apprehend terrorists, medically treat injured civilians, and evacuate those with critical injuries. National broadcasts of these civil-military responses can help win population hearts and minds by demonstrating government concern and action. Thus, each terrorist

¹⁴⁸ Mark Clodfelter, *The Limits of Airpower: The American Bombing of North Vietnam* (New York, N.Y.: The Free Press, 1989), 140.

attack provides an opportunity to turn more of the population against terrorists or insurgents while the host nation government, law enforcement, and military draw support. Ideally these efforts will encourage those who are neutral to start passing information to the government, persuade insurgent sympathizers to become less supportive or neutral towards insurgents, and dissuade insurgents from attacking civilians. Thus, when insurgent or terrorist strategy involves striking civilians, the host nation government can use airpower to help convey its assistance and aid to the public while discouraging internal support and sanctuary to the enemy.

As the host nation government wins more of the population, the potential for eliminating insurgent internal support and sanctuary increases. North Vietnamese General Giap explained, “Without the people we have no information. . . . They hide us, protect us, feed us and tend our wounded.”¹⁴⁹ Giap’s statement identifies why the people are a center of gravity. If popular support for the insurgents diminishes, then the insurgents may become more coercive and hostile in taking the resources they need to survive and operate. As insurgents become more aggressive and threatening in taking what they need, their actions may drive the people’s support into a downward spiral. Thus, host nation use of airpower assistance to win population support away from insurgents or terrorists can indirectly contribute to the cumulative effect of eliminating internal assistance and sanctuary.

Developing innovative ways to trap and capture attacking enemies can provide additional means to show public protection as well as deter future terrorist attacks. For example, a RAND study on *Aerospace Operations in Urban Environments* discussed possible non-lethal weapons that air assets could employ. Non-lethal materials such as low or high friction polymers (e.g. slick or sticky foams respectively) could immobilize enemies while not harming civilians. Acoustic devices, optical effects (e.g. flash grenades), sedative gas, and high-power microwaves may cause effects ranging from temporary disorientation to debilitating pain. But as non-lethal effects become harmful to

¹⁴⁹ Max Boot, *The Savage Wars of Peace: Small Wars and the Rise of American Power* (New York, N.Y.: Basic Books, 2002), 297.

the public, they offer less utility. Nevertheless, air delivered non-lethal options may provide novel ways to capture enemies while avoiding collateral damage.¹⁵⁰

Airpower can also enable land forces to counter adversary attacks driven by strategies of attrition. One method involves deploying small units (combating dispersed forces with dispersed forces) to sweep areas of enemy activity. The small, dispersed groups would appear weak, but air and space power would make them strong. Setting a snare, the small units would entice guerrillas to mass for an attack. Using network data-link technology, these small units would benefit from real-time airborne ISR while simultaneously providing air assets their own and enemy positions. Lower yield, precision bombs or incapacitating non-lethal weapons can provide means to strike enemies too close to friendly units for conventional bombs. Network data link provides an ideal means to pass information as it does not tip off the enemy that air is on the way as well as preventing the targeting and killing of the one making the radio calls. The battle conditions (e.g. proximity of guerrillas; urban, jungle, or mountainous environment; size of enemy force; etc...) would drive the type of ordnance to be delivered. Blue force tracking of friendly soldiers and vehicles would also provide air assets vital, real-time information in the cockpit (e.g. via CAOC feed or data link) to prevent fratricide and build situational awareness. To ensure the success and survival of these small units, on-call and persistent air would need to support them throughout their sweeps and operations.

Airmen may also weaken the adversary trinity by countering the adversary's organization (e.g. alternative government and armed force). Air and space power can disrupt and destroy enemy organizations and deny their sanctuaries. Airpower can disrupt and destroy enemy organizations by attacking or deploying special operations teams to attack or capture the leaders, members, and supporters. These attacks require timely, all-source intelligence enabled by information from the population, captured enemy or defectors, and persistent ISR. As targets are identified, airpower should apply minimal force to achieve desired effects (e.g. lower yield bombs, non-lethal force, AC-130 precision gun employment). For example, information operations could exploit

¹⁵⁰ Alan Vick et al., *Aerospace Operations in Urban Environments: Exploring New Concepts* (Santa Monica, C.A.: RAND, 2000), 189-197.

insurgent or terrorist communications and coordination via computer, phone, or other electronic means to assist targeting. With robust intelligence, air assets could exploit their speed, flexibility, persistence, and precision-guided munitions (PGMs) to conduct capture or decapitation strikes against enemy leaders, planners, and recruiters.

In combating insurgents, guerrillas, and terrorist such as al Qaeda, the population is the primary battlefield, and center of gravity. The US and host nation governments can employ air and space power as part of a strategy to boost legitimacy and popular support while isolating and defeating insurgents. Air and space power's tailorable ability to strengthen a host nation trinity and weaken the adversary trinity is invaluable.

Conclusion

This thesis has addressed how air and space power can best combat adversaries using dispersed and hidden forces. The evidence indicates that air and space functions including special operations, air attack, airlift, ISR, and information operations can play critical roles in combating such adversaries when innovatively employed with agility and flexibility. The model for strengthening a host nation trinity and weakening the adversary trinity provides a useful framework for tailoring air and space means in support of a civil-military-political effort.

Recommendations

First, airmen must move beyond the comfortable conventional mindset to include agile thinking about how to apply air and space power in support of civil-military-political action. The US conventional “big war” mindset, that firepower and freedom to use it brings victory, inhibits airmen from applying relevant air and space means against enemy dispersed forces. Leaders and strategists must grow adept at intertwining air and space power with political, economic, and civil-military efforts.

Second, robust and timely intelligence, training, and education must provide airmen and decision makers an understanding of enemy strategy, organization, support and the population they impact. Rapid air response needed to capture or strike fleeting guerrilla, insurgent, and terrorist targets requires more adaptive and empowered forces. Training and education may empower airmen to act more quickly through decentralized execution as well as with cultural and political understanding. The USAF’s incorporation of regional and interagency issues and relationships into its professional military education and training provide avenues to increase future air and space force adaptability.

Third, the USAF should boost its Foreign Internal Defense (FID) resources and efforts. FID can play a significant role in helping host nations’ governments, militaries, and law enforcement agencies win population support. FID enables vital air and space capabilities needed to strengthen a host nation and weaken its adversaries. To ensure FID capabilities and resources are available for future conflict, the USAF should increase the funding of FID capabilities and expand the 6th Special Operations Squadron now.

Fourth, USAF intelligence and ISR must adapt to the changes in the security environment to provide timely targeting information to airmen and other warfighters. The USAF must pursue HUMINT and the joint and interagency relationships needed to facilitate all-source intelligence. Leaders and commanders should pursue innovative methods and equipment to meet new intelligence challenges such as fusing all-source intelligence into a warfighter network. This warfighter network could provide a means to rapidly pass real-time information on enemy and friendly activity enhancing air power's ability to respond while reducing fratricide and collateral damage.

Fifth, USAF research and development (R&D) should aggressively pursue new technologies to bolster air and space capabilities. Advancing technologies, such as directed energy, may improve air and space power's ability to detect weapons and locate and identify dispersed and hidden adversaries. Airmen could use these capabilities to deny the enemy sanctuary. Rapid innovative solutions from USAF R&D can equip airmen with greater adaptability to enemy changes in strategy, tactics, and employment.

Sixth, Air Force doctrine should capture air and space power efforts in the current counterinsurgency in Iraq as well as past counterinsurgent and counterterrorist endeavors. All too quickly, airmen and decision makers have forgotten or discarded past successes and effective uses of airpower against these asymmetric adversaries.

Air strategy for combating dispersed forces should answer how air and space power supports national objectives. Clausewitz's trinity of the people, the government, and the armed forces provides a foundation for counterinsurgency and counterterrorism strategies. Insurgents and counterinsurgents compete to make the people part of their trinity through government legitimacy and armed forces. Similarly, terrorists want to win support of the people to change or impact their environment. Air and space power's tailorable ability to strengthen a host nation trinity and weaken the adversary trinity provides means to counter insurgents, guerrillas, and terrorists. The overarching strategy provided by the model in this thesis answers how air and space power can best combat enemy dispersed forces in support of national objectives.

Bibliography

- Aboul-Enein, Youssef H. " Hamas, understanding the organization." *Military Review*, July-August 2003, n.p. On-line. Internet, 23 January 2005. Available from http://www.findarticles.com/p/articles/mi_m0PBZ/is_4_83/ai_109268865.
- Air Force Doctrine Document (AFDD) 1. *Air Force Basic Doctrine*, 17 November 2003.
- Air Force Doctrine Document (AFDD) 2-1.2, *Strategic Attack*, 30 September 2003.
- Air Force Doctrine Document (AFDD) 2-3.1, *Foreign Internal Defense (FID)*, 10 May 2004.
- Air Force Manual (AFMAN) 1-1. *United States Air Force Basic Doctrine*, 14 August 1964.
- Aljazeera.net, "Full transcript of bin Laden's speech," 30 October 2004, n.p. On-line. Internet, 17 January 2005. Available from <http://english.aljazeera.net/NR/exeres/79C6AF22-98FB-4A1C-B21F-2BC36E87F61F.htm>.
- Associated Press. "Iraqi insurgents fear bin Laden's moves." *CNN.com website*, 12 January 2005, n.p. On-line. Internet, 17 January 2005. Available from <http://www.cnn.com/2005/WORLD/meast/01/12/iraq.bin.laden.ap/>.
- Associated Press. "Israeli Forces Using High-tech Video Tools." *The Baltimore Sun*, 6 March 2005.
- Barnett, Thomas P.M. *The Pentagon's New Map: War and Peace in the Twenty-first Century*. New York: G.P. Putnam's Sons, 2004.
- Benjamin, Daniel, and Steven Simon. *The Age of Sacred Terror: Radical Islam's War Against America*. New York: Random House Trade Paperbacks, 2003.
- Berger, Carl. *The United States Air Force in Southeast Asia, 1961-1973: An Illustrated Account*. Revised edition. Washington, D.C.: Office of Air Force History, USAF, 1984.
- Biddle, Stephen. "Afghanistan and the Future of Warfare: Implications for Army and Defense Policy." US Army War College Monograph. Carlisle, P.A.: US Army War College, 2002.
- Biddle, Tami Davis. *Rhetoric and Reality in Air Warfare: The Evolution of British and American Ideas About Strategic Bombing, 1914-1945*. Princeton, N.J.: Princeton University Press, 2002.
- Boot, Max. *The Savage Wars of Peace: Small Wars and the Rise of American Power*.

- New York, N.Y.: Basic Books, 2002.
- Brigham, Robert K. *Guerrilla Diplomacy: The NLF's Foreign Relations and the Viet Nam War*. Ithaca, N.Y.: Cornell University Press, 1998.
- Byman, Daniel, et al. *Iran's Security Policy in the Post-Revolutionary Era*. National Defense Research Institute: RAND, 2001.
- Byman, Daniel, and Matthew Waxman. *The Dynamics of Coercion: American Foreign Policy and the Limits of Military Might*. Cambridge and New York: Cambridge University Press, 2002.
- CBSNews.com Who's Who Person. "Commando Solo," 29 January 2003, n.p. On-line. Internet, 16 March 2005. Available from http://www.cbsnews.com/elements/2003/01/29/iraq/whoswho538410_0_2_person.shtml.
- Chandler, Robert W. *War of Ideas: The U.S. Propaganda Campaign in Vietnam*. Boulder, C.O.: Westview Press, 1981.
- Ciezahl, Annia. "Fragmented leadership of the Iraqi insurgency." *The Christian Science Monitor*, *csmonitor.com*, 21 December 2004, n.p. On-line. Internet, 17 January 2005. Available from <http://www.csmonitor.com/2004/1221/p01s03-woiq.html>.
- Clausewitz, Carl von *On War*. Edited and translated by Michael Howard and Peter Paret. Princeton, N.J.: Princeton University Press, 1976.
- Clodfelter, Mark. *The Limits of Airpower, The American bombing of North Vietnam*. New York: The Free Press, 1989.
- Corum, James S., and Wray R. Johnson. *Airpower in Small Wars: Fighting Insurgents and Terrorists*. Lawrence, K.S.: University Press of Kansas, 2003.
- Downs, Major William Brian. "Unconventional Airpower." *Air & Space Power Journal* XIX, no. 1 (Spring 2005): 20-25.
- Drew, Dennis M. "U.S. Airpower Theory and the Insurgent Challenge: A Short Journey to Confusion." *The Journal of Military History* 62 (October 1998): 809-32.
- Drew, Dennis M. "Air Theory, Air Force, and Low Intensity Conflict: A Short Journey to Confusion." *The Paths of Heaven: The Evolution of Airpower Theory*. Maxwell AFB, A.L.: Air University Press, 1997.
- "EC-130E Commando Solo / Rivet Rider." *Federation of American Scientists website*, n.p. On-line. Internet, 16 March 2005. Available from <http://www.fas.org/man/dod-101/sys/ac/ec-130e.htm>.

- Ereli, Adam. US State Department Press Statement. Washington, D.C., 28 December 2004, n.p. On-line. Internet, 17 January 2005. Available from <http://www.state.gov/r/pa/prs/ps/2004/40081.htm>.
- Faber, Peter R. "Interwar US Army Aviation and the Air Corps Tactical School: Incubators of American Airpower," *The Paths of Heaven: The Evolution of Airpower Theory*. Maxwell Air Force Base, A.L.: Air University Press, 1997.
- Fulghum, David A. "USAF Volunteers C-130s To Take Trucks Off Iraqi Roads." *Aviation Week & Space Technology*, 20 December 2004, 32.
- Futrell, Robert F. *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force, 1907-1960*. vol 1. Maxwell AFB, Ala.: Air University Press, 1989.
- Gatlin, Colonel Jesse C. *Igloo White (Initial Phase)*. HQ PACAF, Directorate, Tactical Evaluation: Project CHECO Southeast Asia Report, 31 July 1968.
- Gombo, Major Johnie. "Understanding Guerrilla Warfare." Marine Corps University Command and Staff College Thesis, 1990, n.p. On-line. Internet, 23 January 2005. Available from <http://www.globalsecurity.org/military/library/report/1990/GJ.htm>.
- Griffith II, Samuel B. *Mao Tse-Tung on Guerrilla Warfare*. Baltimore, M.D.: The Nautical & Aviation Publishing Company of America, 1992.
- Gunaratna, Rohan. *Inside al Qaeda: Global Network of Terror*. New York: Columbia University Press, 2002.
- Haave, Col Christopher E., and Lt Col Phil M. Haun. *A-10s over Kosovo: The Victory of Airpower over a Fielded Army as Told by the Airmen Who Fought in Operation Allied Force*. Maxwell AFB, A.L.: Air University Press, 2003.
- Hosmer, Stephen T. *Psychological Effects of U.S. Air Operations in Four Wars 1941-1991: Lessons for U.S. Commanders*. Santa Monica, C.A.: RAND, 1996.
- Hroub, Khaled. *Hamas: Political Thought and Practice*. Washington, D.C.: Institute for Palestine Studies, 2000.
- Joes, Anthony James. *Resisting Rebellion: The History and Politics of Counterinsurgency*. Lexington, K.Y.: The University Press of Kentucky, 2004.
- Johnson, Wray R. "Ends Versus Means: The 6th Special Operations Squadron and the Icarus Syndrome." *Air & Space Power Chronicles - Chronicles Online Journal*, 12 January 2000, n.p. On-line. Internet, 4 February 2005. Available from

<http://www.airpower.maxwell.af.mil/airchronicles/cc/WJohnson.html>.

Joint Publication (JP) 1-02. *Department of Defense Dictionary of Military and Associated Terms*, 12 April 2001, amended 30 November 2004.

Kiras, James D. "Terrorism and Irregular Warfare." In *Strategy in the Contemporary World: An Introduction to Strategic Studies*. Edited by John Baylis et al. Oxford University Press, 2002.

Lasseter, Tom. "U.S. casualties drop; Attacks on Iraqi rise." Knight Ridder News Service. *The Miami Herald*, 23 March 2005.

Lewis, Bernard. *The Crisis of Islam: Holy War and Unholy Terror*. New York: The Modern Library, 2003.

Lichbach, Mark. *The Rebel's Dilemma*. University of Michigan Press, 1995.

Luft, Gal. "The Logic of Israel's Targeted Killing." *Mid East Quarterly* X, no. 1 (Winter 2003): 1-7.

McCuen, John. *The Art of Counter-Revolutionary War: The Strategy of Counter-Insurgency*. Harrisburg, P.A.: Stackpole Books, 1966.

Mitchell, William. *Winged Defense: The Development and Possibilities of Modern Air Power—Economic and Military*. Mineola, N.Y.: Dover Publications, Inc, 1988.

Momyer, General William W. *Airpower in Three Wars (WWII, Korea, Vietnam)*. Maxwell AFB, Ala.: Air University Press, 2003.

Nagl, John. *Counterinsurgency Lessons from Malaya and Vietnam: Learning to Eat Soup with a Knife*. Westport, C.T.: Praeger, 2002.

***National Security Strategy of the United States of America*, September 2002.**

Nordland, Rod; Tom Masland; and Christopher Dickey. "Unmasking the Insurgents." *Newsweek*, 7 February 2005, 24.

Northeast Intelligence Network website, n.p. On-line. Internet, 16 January 2005.
Available from <http://www.homelandsecurityus.com/terrorgroups.asp>.

The Pentagon Papers: The Department of Defense History of United States Decisionmaking on Vietnam. Senator Gravel Edition. Boston: Beacon Press, 1971.

Pike, Douglas. *PAVN: People's Army of Vietnam*. Novato, C.A.: Presidio Press, 1986.

Post, Jerrold M. "Killing In The Name Of God: Osama Bin Laden And Al Qaeda."

In

Know Thy Enemy: Profiles of Adversary Leaders and Their Strategic Cultures.

Maxwell AFB, A.L.: USAF Counterproliferation Center, July 2003.

Record, Jeffrey. "How America's Own Military Performance in Vietnam Aided and

Abetted the North's Victory." In *Why the North Won the Vietnam War*.

Edited

by Marc Jason Gilbert. New York: Palgrave, 2002.

Ricks, Thomas E. "General: Iraqi Insurgents Directed From Syria." *The*

Washington

***Post*, 17 December 2004.**

Rosenberg, David Alan. "The Origins of Overkill: Nuclear Weapons and American Strategy, 1945-1960." *International Security* 7, no. 4 (Spring 1983): 3-72.

Reuters. "Senior Muslim figures back Iraqi insurgents." *Australian Broadcasting Corporation*, 23 August 2004, n.p. On-line. Internet, 24 January 2005.
Available from <http://www.abc.net.au/news/newsitems/200408/s1182542.htm>.

Sharp, Admiral U.S.G., and General W.C. Westmoreland. *Report On The War In Vietnam*. Washington, D.C.: U.S. Government Printing Office, 30 June 1968.

Simpson, Jay Gordon. "Not by Bombs Alone: Lessons from Malaya." *Joint Force Quarterly*, Summer 1999, 91-98.

Todd, Brian. "Insurgent Strategy." CNN, 8 November 2004, n.p. On-line. Internet, 24 January 2005. Available from <http://www.cnn.com/2004/US/11/08/insurgent.strategy/>.

Tucker, Spencer C., ed. *Encyclopedia of the Vietnam War: A Political, Social, and Military History*. New York, N.Y.: Oxford University Press, 2000.

U.S. Department of State. "Foreign Terrorist Organizations." Office of Counterterrorism Fact Sheet. Washington, D.C., 29 December 2004, n.p. On-line. Internet, 3 May 2005. Available from <http://www.state.gov/s/ct/rls/fs/2004/37191.htm>.

United Nations Press Release GA/10152. "General Assembly, Meeting In Resumed Emergency Special Session, Demands Israel Not Deport Or Threaten Safety Of Yasser Arafat," 19 September 2003, n.p. On-line. Internet, 3 May 2005. Available from <http://www.un.org/News/Press/docs/2003/ga10152.doc.htm>.

United Nations Press Release SC/7359. "Council Hears Renewed Calls For Implementation Of Its Resolutions, Dispatch Of International Monitoring Force

To Middle East,” 9 April 2002, n.p. On-line. Internet, 3 May 2005. Available from <http://www.un.org/News/Press/docs/2002/SC7359.doc.htm>.

United States Marine Corps. *Small Wars Manual*. Washington, D.C: United States Government Printing Office, 1940.

Vick, Alan, et al. *Aerospace Operations in Urban Environments: Exploring New Concepts*. Santa Monica, C.A.: RAND, 2000.

Wall, Robert. “New Tactics, Tools Emerge in Manpads Versus Aircraft Standoff.” *Aviation Week & Space Technology*, 8 March 2004, 58.

Walt, Stephen. “The Search for a Science of Strategy: A Review Essay on Makers of Modern Strategy.” *International Security* 12, no. 1 (Summer 1987): 148-165.

Wooten, James P. “ Hamas: The Organization, Goals, and Tactics of a Militant Palestinian Organization,” CRS Report for Congress. Congressional Research Service: The Library of Congress, 19 August 1993.

Young, Marilyn. “Ho, Ho, Ho Chi Minh, Ho Chi Minh Is Gonna Win!” In *Why the North Won the Vietnam War*. Edited by Marc Jason Gilbert. New York, N.Y.: Palgrave, 2002.

Zimmerman, Tim. “Coercive Diplomacy and Libya.” In *The Limits of Coercive Diplomacy*. Edited by Alexander George and William E. Simons. Boulder, C.O.: Westview Press, 1994.